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(FILE 'HOME' ENTERED AT 10:57:58 ON 14 JUN 2007)

FILE 'REGISTRY' ENTERED AT 10:58:10 ON 14 JUN 2007

L1 STRUCTURE UPLOADED

L2 10 S L1

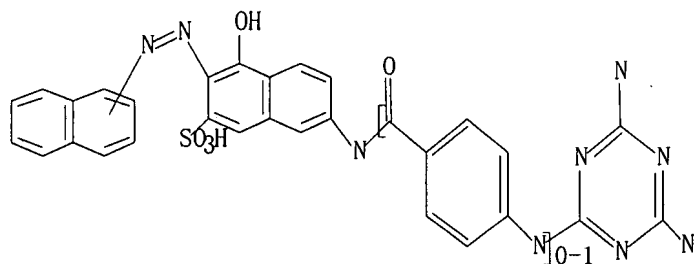
L3 166 S L1 FULL

FILE 'CAPLUS' ENTERED AT 10:58:57 ON 14 JUN 2007

L4 76 S L3

=> d que l4 stat

L1 STR



Structure attributes must be viewed using STN Express query preparation.

L3 166 SEA FILE=REGISTRY SSS FUL L1

L4 76 SEA FILE=CAPLUS ABB=ON PLU=ON L3

=> d 1-76 ibib iabs hitstr

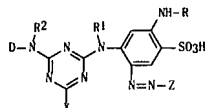
L4 ANSWER 1 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN  
 ACCESSION NUMBER: 2006:1106399 CAPLUS  
 DOCUMENT NUMBER: 145:439892  
 TITLE: Reactive dye for fibers having excellent dyeing behaviors  
 INVENTOR(S): Chen, Wenzheng; Huang, Hongzhang  
 PATENT ASSIGNEE(S): Ethical International Trading & Warehousing (Shanghai) Co., Ltd., Peop. Rep. China  
 SOURCE: Faming Zhuanli Shenqing Gongkai Shuomingshu, 41pp.  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Chinese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CN 1847324	A	20061018	CN 2005-10065095	20050413
EP 1795562	A2	20070613	EP 2006-7178	20060405

R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, MK, YU

PRIORITY APPLN. INFO.: CN 2005-10065095 A 20050413

GRAPHIC IMAGE:



ABSTRACT:  
 Reactive dye 1 for fibers is prepared (Z is -C6H3(1)pQ or -naphthyl(1)psO2Y, X is halogen atom, quaternary ammonium salt, pyridine, 3-carboxypyridin-1-yl, 4-carboxypyridin-1-yl, methylpyridine, or carbamyl pyridine; Y = -OH, vinyl, or -CH2-CH2-W, wherein W is a group which can be removed by base treatment, preferably to Cl, -OSO3H, or carboxypyridinyl; I = -SO3H, Cl-4 alkyl, Cl-4 alkoxy, or Cl-4 alkoxycarbonyl; p = 0, 1, 2, or 3; Q = -SO2-Y, -CONH(CH2)nSO2Y, -(O)-CH2-CONH-(CH2)n-SO2-Y, or -NH-CO-T; T =  $\alpha$ ,  $\beta$ -halogen substituted propionyl or  $\alpha$ -halogen substituted acryloyl; n and m are an integral from 1 to 6, resp.; o = 0, 1, 2, or 3; and R, R1, and R2 are one of H, Cl-4 alkyl, halogen, -OH, -CN, Cl-4 alkoxy, Cl-4 alkoxycarbonyl, -COOH, etc., and O is reactive or nonreactive chromophore group). This dye is suitable for dyeing cellulose fiber in aqueous bath with the advantages of good water-washing fastness and deep dyeing and excellent chlorine-bleaching fastness.

IT 912572-92-0  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (azo- and triazine-containing reactive dye for dyeing of fibers)  
 RN 912572-92-0 CAPLUS  
 CN Pyridinium, 3-(aminocarbonyl)-1-[4-[[5-[(2-carboxyethyl)amino]-2-[[2-methoxy-4-[[2-(sulfoxy)ethyl]sulfonyl]phenyl]azo]-4-sulfonyl]amino]-6-[[6-[(1,5-disulfo-2-naphthalenyl)azo]-5-hydroxy-7-sulfo-2-

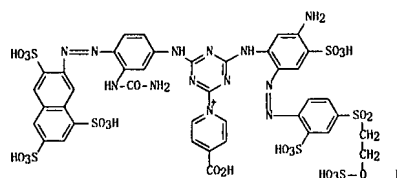
L4 ANSWER 2 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN  
 ACCESSION NUMBER: 2006:1099697 CAPLUS  
 DOCUMENT NUMBER: 145:439891  
 TITLE: Fiber reactive dyes based on aminotriazinylaminoarylamino derivatives  
 INVENTOR(S): Chen, Wen-jang; Huang, Hong-Chang  
 PATENT ASSIGNEE(S): Taiwan  
 SOURCE: U.S. Pat. Appl. Publ., 32pp.  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2006230552	A1	20061019	US 2005-246766	20051006
US 2006230552	A1	20061019	CN 2005-10051006	20050413

PRIORITY APPLN. INFO.: MARPAT 145:439891

OTHER SOURCE(S):

GRAPHIC IMAGE:

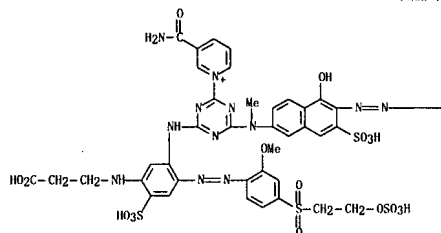


ABSTRACT:  
 Fiber-reactive dyes, useful for materials containing cellulose fibers, have (amino) (sulfo) (azo) phenylaminotriazinylamino groups. Dyed materials exhibit outstanding wash fastness, build-up, and chlorine fastness. A typical dye 1 was manufactured by diazotization of 7-amino-1,3,6-trisulfonaphthalene, coupling of the resulting diazonium salt with  $m$ -aminophenylurea, reaction of the resulting intermediate with cyanuric chloride, reaction of the 3rd intermediate with 2,4-diamino-1-benzenesulfonic acid, reaction of the 4th intermediate with 4-carboxypyridinium, and coupling of the 5th intermediate with diazotized 4-(2-sulfoethylsulfonyl)-2-sulfoaniline.

IT 912572-92-0P  
 RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (fiber reactive dyes based on aminotriazinylaminoarylamino deriva. for cellulose fiber-containing materials)  
 RN 912572-92-0 CAPLUS  
 CN Pyridinium, 3-(aminocarbonyl)-1-[4-[[5-[(2-carboxyethyl)amino]-2-[[2-methoxy-4-[[2-(sulfoxy)ethyl]sulfonyl]phenyl]azo]-4-sulfonyl]amino]-6-[[6-[(1,5-disulfo-2-naphthalenyl)azo]-5-hydroxy-7-sulfo-2-naphthalenyl]methylamino]-1,3,5-triazin-2-yl]- (9C1) (CA INDEX NAME)

L4 ANSWER 1 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)  
 naphthalenyl]methylamino]-1,3,5-triazin-2-yl]- (9C1) (CA INDEX NAME)

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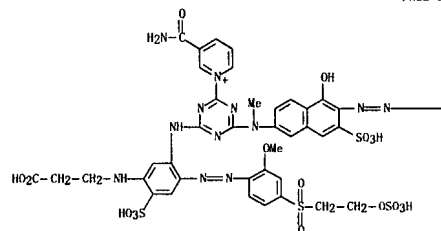


PAGE 1-B



L4 ANSWER 2 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 1-A

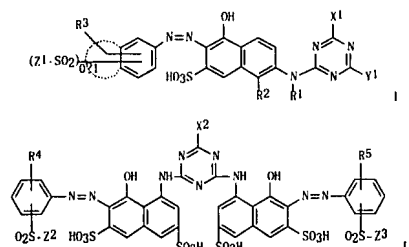


PAGE 1-B



L4 ANSWER 3 OF 76 CAPLUS COPYRIGHT 2007 ACS ON STN  
 ACCESSION NUMBER: 2006:788231 CAPLUS  
 DOCUMENT NUMBER: 145:273206  
 TITLE: Reactive dye composition for dyeing fiber and dyeing method using the same  
 INVENTOR(S): Cho, Seong Yong; Kang, Ju Seok; Kim, Seok Jin; Yoon, Wu Jin  
 PATENT ASSIGNEE(S): Kyung-In Synthetic Corporation, S. Korea  
 SOURCE: Faming Zhuanli Shenqing Gongkai Shuomingshu, 25pp.  
 CODEN: CNXXEV  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Chinese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CN 1810893	A	20060802	CN 2006-1006283	20060124
US 2006185556	A1	20060824	US 2006-338983	20060125
PRIORITY APPLN. INFO.:			KR 2005-6616	A 20050125



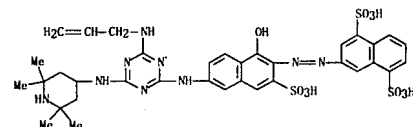
ABSTRACT:  
 Title dye composition comprises at least one reactive dye I and at least one reactive dye II; wherein R1 = H, Cl-4 alkyl optionally substituted by hydroxyl, sulfonic group, etc.; R2-R5 = independently H, Cl-4 alkyl, Cl-4 alkoxy, etc.; Y1 = NR6(CH2)2-3SO2A1 (3a), NR7C6H3R8SO2A2 (3b), or NR9C6H3R10R11 (3c), R6, R7 and R9 = independently H, Cl-4 alkyl optionally substituted by hydroxyl, sulfonic group, etc.; R8, R10, R11 = independently H, Cl-4 alkyl, Cl-4 alkoxy, etc.; A1, A2, and Z1 to Z3 = independently vinyl, etc.; X1 and X2 = independently substituent groups with formula (3a), (3b), or (3c). When used to dye fiber material containing nitrogen or hydroxyl, especially cellulose fiber material, the composition can give color (such as light orange) hard to be achieved by single dye and exhibits excellent absorbability and fixation, outstanding light and moisture fastness.

IT 906796-03-0  
 RL: TEM (Technical or engineered material use); USES (Uses)

L4 ANSWER 4 OF 76 CAPLUS COPYRIGHT 2007 ACS ON STN  
 ACCESSION NUMBER: 2006:744621 CAPLUS  
 DOCUMENT NUMBER: 146:297664  
 TITLE: On the synthesis and the application of some reactive triazine azo dyes containing tetramethylpiperidine fragment  
 AUTHOR(S): Miladinova, P.  
 CORPORATE SOURCE: University of Chemical Technology and Metallurgy, Sofia, 1756, Bulg.  
 SOURCE: Journal of the University of Chemical Technology and Metallurgy (2005), Volume Date 2006, 41(2), 147-152  
 CODEN: JUCTBJ; ISSN: 1311-7629  
 PUBLISHER: University of Chemical Technology and Metallurgy  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English

ABSTRACT:  
 The synthesis of two reactive triazine azo dyes containing a tetramethylpiperidine (TMP) residue in their structure was investigated. Two applied in the practice azo dyes, a yellow and a red one as basic chromophores were used. The synthesis of the dyes was controlled by thin-layer chromatog. (TLC). The compds. were characterized also by UV/Vis, IR and 1H-NMR spectra. The synthesized two and another eight triazine reactive dyes, three of them containing a TMP fragment and five trade products not containing a TMP fragment were investigated. Cotton fabrics were dyed and their fastness of perspiration, dry and wet treating as well as machine washing were determined. The fabrics with an intense color and good characteristics were obtained thus presenting a possibility for extension of the applied in practice reactive dyes.

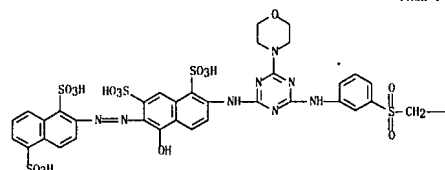
IT 863233-06-1  
 RL: PRP (Properties)  
 (synthesis reactive triazine azo dyes containing tetramethylpiperidine fragment)  
 RN 863233-06-1 CAPLUS  
 CN 1,5-Naphthalenedisulfonic acid, 3-[[1-hydroxy-6-[[4-(2-propenylamino)-6-[[2,2,6,6-tetramethyl-4-piperidyl]amino]-1,3,5-triazin-2-yl]amino]-3-sulfo-2-naphthalenyl]azo]- (9C1) (CA INDEX NAME)



REFERENCE COUNT: 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 3 OF 76 CAPLUS COPYRIGHT 2007 ACS ON STN (Continued)  
 (reactive dye compn. for dyeing nitrogen- or hydroxy-contg. fiber)  
 RN 906796-03-0 CAPLUS  
 CN 1,5-Naphthalenedisulfonic acid, 2-[[1-hydroxy-6-[[4-(4-morpholinyl)-6-[[3-[[2-(sulfoxy)ethyl]sulfonyl]phenyl]amino]-1,3,5-triazin-2-yl]amino]-3,5-disulfo-2-naphthalenyl]azo]- (9C1) (CA INDEX NAME)

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-CH2--OSO3H

L4 ANSWER 5 OF 76 CAPLUS COPYRIGHT 2007 ACS ON STN  
 ACCESSION NUMBER: 2005:460018 CAPLUS  
 DOCUMENT NUMBER: 143:154893  
 TITLE: Composition of bright azo red dyes for dyeing fiber and leather  
 INVENTOR(S): Xi, Xiangyun; Wu, Jinglei; Li, Xuanji  
 PATENT ASSIGNEE(S): Shanghai Dyestuff Chemical Plant No.8, Peop. Rep. China  
 SOURCE: Faming Zhuanli Shenqing Gongkai Shuomingshu, No pp. given  
 CODEN: CNXXEV  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Chinese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

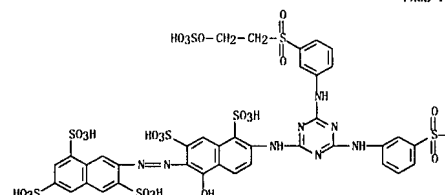
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CN 1511884	A	20040714	CN 2002-160739	20021227
PRIORITY APPLN. INFO.:			CN 2002-160739	20021227

OTHER SOURCE(S): NARPAT 143:154893

ABSTRACT:  
 The bright red dye composition suitable for dyeing and printing cotton, wool, silk, leather, synthetic polyamide fiber and other blended fabric are prepared via compounding several kinds of active dyes. The active dye compns. have excellent coloring capacity and are especially suitable for middle temperature dyeing of cotton fabric at 50-70°.

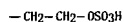
IT 859502-99-1 859503-00-7 859503-01-8  
 RL: PEP (Physical, engineering or chemical process); PYP (Physical process); TEM (Technical or engineered material use); PROC (Process); USES (Uses)  
 (composition of azo bright red dyes for dyeing fiber and leather)  
 RN 859502-99-1 CAPLUS  
 CN 1,3,6-Naphthalenetrisulfonic acid, 7-[[6-[[4,6-bis[[3-[[2-(sulfoxy)ethyl]sulfonyl]phenyl]amino]-1,3,5-triazin-2-yl]amino]-1-hydroxy-3,5-disulfo-2-naphthalenyl]azo]- (9C1) (CA INDEX NAME)

PAGE 1-A

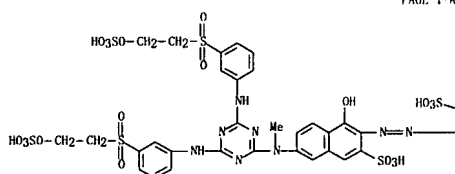


L4 ANSWER 5 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 1-B

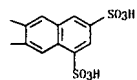


RN 859503-00-7 CAPLUS  
CN 1,3,6-Naphthalenetrisulfonic acid, 7-[[6-[[[4,6-bis[[3-[[2-(sulfoxy)ethyl)sulfonyl]phenyl]amino]-1,3,5-triazin-2-yl]methylamino]-1-hydroxy-3-sulfo-2-naphthalenyl]azo]- (9C1) (CA INDEX NAME)



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RN 859503-01-8 CAPLUS  
CN 1,5-Naphthalenedisulfonic acid, 2-[[[6-[[[4,6-bis[[3-[[2-(sulfoxy)ethyl)sulfonyl]phenyl]amino]-1,3,5-triazin-2-yl]amino]-1-hydroxy-3,5-disulfo-2-naphthalenyl]azo]- (9C1) (CA INDEX NAME)

L4 ANSWER 6 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2005:137316 CAPLUS

DOCUMENT NUMBER: 143:249710

TITLE: On the synthesis of some reactive triazine azo dyes

AUTHOR(S): Petrova-Miladinova, P.; Konstantinova, T. N.

CORPORATE SOURCE: Organic Synthesis Department, University of Chemical Technology &amp; Metallurgy, Sofia, 1756, Bulg.

SOURCE: Dyes and Pigments (2005), 67(1), 63-69

CODEN: DYPIDX; ISSN: 0143-7208

PUBLISHER: Elsevier Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 143:249710

## ABSTRACT:

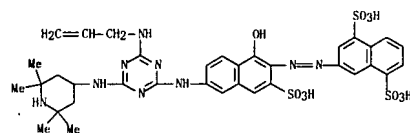
The synthesis of five new reactive triazine azo dyes and their intermediates was investigated. Three of these dyes contained a tetramethylpiperidine (TMP) group and four of them contained a polymerizable group in their mol. Two different reaction schemes for synthesis were studied and the most suitable was determined. Quant. thin-layer chromatog. to monitor the synthesis was applied. Cotton fabrics were dyed and their color characteristics were measured. Copolym. with acrylamide and acrylonitrile to give polymers with an intense orange color resistant to solvent extraction was discussed. The photostability of the dyes in solution and on cotton fabrics was studied and it was found that two of the dyes containing a TMP fragment had good photostability.

IT 863233-06-1P

RL: PRP (Properties); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(dye; preparation of reactive triazine azo dyes containing allyl or piperidine groups)

RN 863233-06-1 CAPLUS

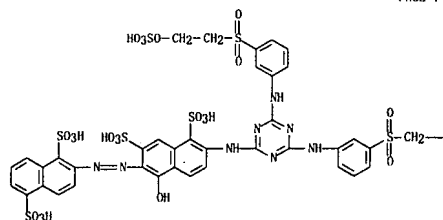
CN 1,5-Naphthalenedisulfonic acid, 3-[[[1-hydroxy-6-[[4-(2-propenylamino)-6-[[2,2,6,6-tetramethyl-4-piperidinyl]amino]-1,3,5-triazin-2-yl]amino]-3-sulfo-2-naphthalenyl]azo]- (9C1) (CA INDEX NAME)



REFERENCE COUNT: 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 5 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 1-A



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L4 ANSWER 7 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2005:135735 CAPLUS

DOCUMENT NUMBER: 142:221378

TITLE: Water-soluble monoazo compounds or their salts for manufacture of water-soluble orange ink-jet inks, their printing and printed articles, and ink-jet printers assembled with the same

INVENTOR(S): Kajiura, Noriko; Shirasaki, Yasuo; Nagasaki, Kazunobu

PATENT ASSIGNEE(S): Nippon Kayaku Co., Ltd., Japan; Nippon Kayaku Tokyo Co., Ltd.

SOURCE: Jpn. Kokai Tokkyo Koho, 23 pp.

CODEN: JKKXAF

DOCUMENT TYPE: Patent

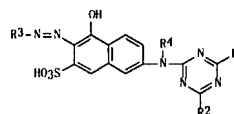
LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2005042028	A	20050217	JP 2003-278534	20030723
PRIORITY APPL. INFO:			JP 2003-278534	20030723
OTHER SOURCE(S):			MARPAT 142:221378	

GRAPHIC IMAGE:



## ABSTRACT:

The water-soluble orange ink-jet inks contain water-soluble monoazo compds. comprise those represented by free acids 1 (R1 = amino, OH, SH; R3 = Ph, naphthyl; R4 = H, C1-2 alkyl) or their salts. Thus, diazotizing 36.3 parts 2-naphthylamino-1,5-disulfonic acid, coupling with acetylation products of 4-hydroxy-7-methylamino-2-naphthalenesulfonic acid and Ac2O, hydrolysis, neutralizing, salting out, and filtration gave a monoazo compound, which was dissolved in water and subjected to primary condensation in the presence of cyanuric chloride, neutralizing, 2nd condensation in the presence of NH3, 3rd condensation in the presence of morpholine, salting out, and filtration to give 50 parts of a blight orange monoazo compound 1 (R1 = NH2, R2 = morpholino, Y2 = SO3H, m = 2, position 1,5-, R4 = Me; λmax 488 nm in water).

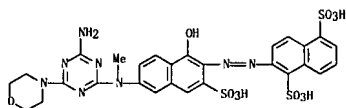
IT 839708-70-2P

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(water-soluble monoazo compds. or their salts for manufacture of water-soluble orange ink-jet inks)

RN 839708-70-2 CAPLUS

CN 1,5-Naphthalenedisulfonic acid, 2-[[[6-[[[4-amino-6-(4-morpholinyl)-1,3,5-triazin-2-yl]methylamino]-1-hydroxy-3-sulfo-2-naphthalenyl]azo]- (9C1) (CA INDEX NAME)

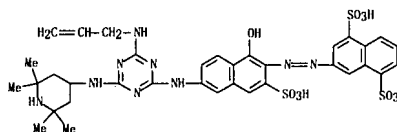
L4 ANSWER 7 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



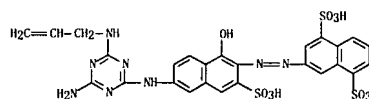
L4 ANSWER 8 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2005:90616 CAPLUS  
 DOCUMENT NUMBER: 143:327725  
 TITLE: On the photostability of some triazine azo dyes and their copolymers with acrylamide and acrylonitrile  
 AUTHOR(S): Petrova-Miladinova, P.; Konstantinova, T.  
 CORPORATE SOURCE: University of Chemical Technology and Metallurgy, Sofia, 1756, Bulg.  
 SOURCE: Journal of the University of Chemical Technology and Metallurgy (2004), 39(4), 405-412  
 CODEN: JUCTB3; ISSN: 1311-7629  
 PUBLISHER: University of Chemical Technology and Metallurgy  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 ABSTRACT: The photostability of 6 triazine azo dyes, four of them polymerizable and three of them containing a tetramethylpiperidine (TMP) fragment in their mol., was investigated. It was found that the presence of the TAP group increased the photostability. Eight copolymers with acrylamide and acrylonitrile having an intense color stable to solvents were obtained and dye photostability was increased by the polymerization. The influence of the dyes on the photostability of copolymers were studied as well and it was found that two of the dyes with TMP groups had good stabilizing effects and could be recommended.

IT 863233-06-1 865245-45-0  
 RL: PRP (Properties): TEM (Technical or engineered material use): USES (Uses)  
 (dye: photostability of triazine azo dyes and their acrylic copolymers)  
 RN 863233-06-1 CAPLUS  
 CN 1,5-Naphthalenedisulfonic acid, 3-[[[1-hydroxy-6-[[4-(2-propenylamino)-6-[(2,2,6,6-tetramethyl-4-piperidyl)amino]-1,3,5-triazin-2-yl]amino]-3-sulfo-2-naphthalenyl]azo]- (9CI) (CA INDEX NAME)

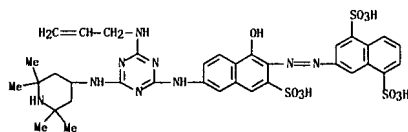


RN 865245-45-0 CAPLUS  
 CN 1,5-Naphthalenedisulfonic acid, 3-[[[6-[[4-amino-6-(2-propenylamino)-1,3,5-triazin-2-yl]amino]-1-hydroxy-3-sulfo-2-naphthalenyl]azo]- (9CI) (CA INDEX NAME)

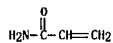


L4 ANSWER 8 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

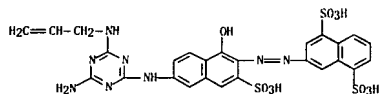
IT 865245-43-8P 865245-46-1P 865245-49-4P  
 865245-51-8P  
 RL: PRP (Properties): SPN (Synthetic preparation): PREP (Preparation)  
 (photostability of triazine azo dyes and their acrylic copolymers)  
 RN 865245-43-8 CAPLUS  
 CN 1,5-Naphthalenedisulfonic acid, 3-[[[1-hydroxy-6-[[4-(2-propenylamino)-6-[(2,2,6,6-tetramethyl-4-piperidyl)amino]-1,3,5-triazin-2-yl]amino]-3-sulfo-2-naphthalenyl]azo]-, polymer with 2-propenamide (9CI) (CA INDEX NAME)  
 CM 1  
 CRN 863233-06-1  
 CMF C35 H39 N9 O10 S3



CM 2  
 CRN 79-06-1  
 CMF C3 H5 N O



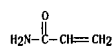
RN 865245-46-1 CAPLUS  
 CN 1,5-Naphthalenedisulfonic acid, 3-[[[6-[[4-amino-6-(2-propenylamino)-1,3,5-triazin-2-yl]amino]-1-hydroxy-3-sulfo-2-naphthalenyl]azo]-, polymer with 2-propenamide (9CI) (CA INDEX NAME)  
 CM 1  
 CRN 865245-45-0  
 CMF C26 H22 N8 O10 S3



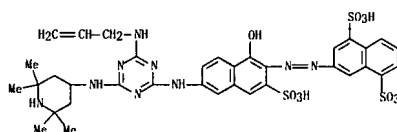
CM 2  
 CRN 79-06-1

L4 ANSWER 8 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

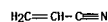
CMF C3 H5 N O



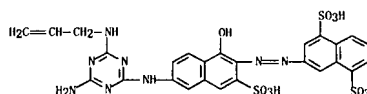
RN 865245-49-4 CAPLUS  
 CN 1,5-Naphthalenedisulfonic acid, 3-[[[1-hydroxy-6-[[4-(2-propenylamino)-6-[(2,2,6,6-tetramethyl-4-piperidyl)amino]-1,3,5-triazin-2-yl]amino]-3-sulfo-2-naphthalenyl]azo]-, polymer with 2-propenitrile (9CI) (CA INDEX NAME)  
 CM 1  
 CRN 863233-06-1  
 CMF C35 H39 N9 O10 S3



CM 2  
 CRN 107-13-1  
 CMF C3 H3 N



RN 865245-51-8 CAPLUS  
 CN 1,5-Naphthalenedisulfonic acid, 3-[[[6-[[4-amino-6-(2-propenylamino)-1,3,5-triazin-2-yl]amino]-1-hydroxy-3-sulfo-2-naphthalenyl]azo]-, polymer with 2-propenitrile (9CI) (CA INDEX NAME)  
 CM 1  
 CRN 865245-45-0  
 CMF C26 H22 N8 O10 S3



CM 2

1.4 ANSWER 8 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

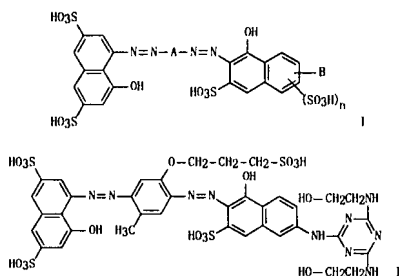
CRN 107-13-1  
CMF C3 H3 N $H_2C=CH-C\equiv N$ 

REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

1.4 ANSWER 9 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2004:993269 CAPLUS  
 DOCUMENT NUMBER: 141:412572  
 TITLE: Disazo compounds and water-thinned inks and colored articles  
 INVENTOR(S): Ono, Hiroaki; Matsui, Takahiko; Yoneda, Takashi; Shirasaki, Yasuo; Kawaida, Yoshiki  
 PATENT ASSIGNEE(S): Nippon Kayaku Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 35 pp.  
 CODEN: JKAAXF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004323712	A	20041118	JP 2003-121336	20030425
PRIORITY APPLN. INFO.:			JP 2003-121336	20030425
OTHER SOURCE(S):				
GRAPHIC IMAGE:				



ABSTRACT:  
 The inks contain I (A = 2,5-disubstituted 1,4-phenylene, substituted 1,4-naphthalene; B = substituted triazinylamino; n = 0, 1; where B is at 2- or 3-position and sulfo group is at 3- or 4-position of the naphthalene ring). Thus, I1 was prepared and formulated into an aqueous ink-jet ink giving images with high color (black) d., good resistance to ozone, light and water when printed on paper.

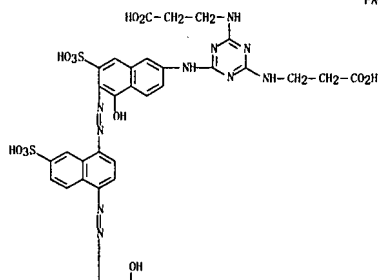
IT 793723-89-4P  
 RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (disazo compds. for water-thinned ink-jet inks with good ozone, light, and water resistance)  
 RN 793723-89-4 CAPLUS  
 CN  $\beta$ -Alanine, N, N'-[6-[[5-hydroxy-6-[[4-[[8-hydroxy-3,6-disulfo-1-

## APPLICANT

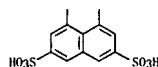
1.4 ANSWER 9 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

naphthalenyl]azo]-7-sulfo-1-naphthalenyl]azo]-7-sulfo-2-naphthalenyl]amino]-1,3,5-triazine-2,4-diyl]bis- (9C1) (CA INDEX NAME)

PAGE 1-A



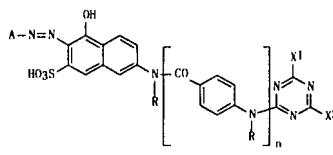
PAGE 2-A



1.4 ANSWER 10 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2004:120915 CAPLUS  
 DOCUMENT NUMBER: 140:165440  
 TITLE: Anionic monoazo dyes, their production and their use  
 INVENTOR(S): Lennartz, Michael; Weiss, Sandra  
 PATENT ASSIGNEE(S): Ciba Specialty Chemicals Holding Inc., Switz.  
 SOURCE: PCT Int. Appl., 34 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

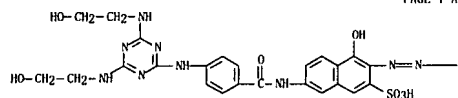
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004013233	A1	20040212	WO 2003-EP7770	20030717
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MY, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2493627	A1	20040212	CA 2003-2493627	20030717
AU 2003246711	A1	20040223	AU 2003-246711	20030717
EP 1525267	A1	20050427	EP 2003-766203	20030717
EP 1525267	B1	20070321		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
BR 2003012902	A	20050614	BR 2003-12902	20030717
CN 1671799	A	20050921	CN 2003-817438	20030717
JP 2005533914	A	20051110	JP 2004-525232	20030717
AT 357484	T	20070415	AT 2003-766203	20030717
US 2005256305	A1	20051117	US 2005-520964	20050111
IN 2005CN00251	A	20070330	IN 2005-CN251	20050223
PRIORITY APPLN. INFO.:			EP 2002-405652	A 20020726
OTHER SOURCE(S):			WO 2003-EP7770	W 20030717
GRAPHIC IMAGE:			CASREACT 140:165440; MARPAT 140:165440	



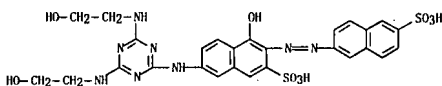
ABSTRACT:  
 Yellowish-red anionic monoazo dyes (I: A = naphthyl containing 1-2 sulfo and/or carboxy groups; R = H, Cl-4-alkyl; X1, X2 = substituted amino; n = 0-1) are disclosed, which show high degrees of exhaustion and color strength and

L4 ANSWER 10 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)  
fastness when used to dye paper and which exhibit excellent water soly.  
facilitating the use of cond. liq. compns. In an example, cyanuric chloride  
was condensed with ethanolamine and l-acid (1:2:1) to give a coupling component  
which when used with diazotized 2-naphthylamine-6-sulfonic acid gave a red dye.

IT 656240-23-2P  
RL: IMF (Industrial manufacture); TEM (Technical or engineered material  
use); PREP (Preparation); USES (Uses)  
(orange dye; production of anionic monoazo dyes for paper)  
RN 656240-23-2 CAPLUS  
CN 1,5-Naphthalenedisulfonic acid, 2-[[[6-[[[4-[[4,6-bis[(2-hydroxyethyl)amino]-  
1,3,5-triazin-2-yl]amino]benzoyl]amino]-1-hydroxy-3-sulfo-2-  
naphthalenyl]azo]- (9C1) (CA INDEX NAME)



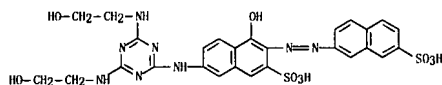
IT 656240-19-6P 656240-20-9P 656240-21-0P  
656240-22-1P  
RL: IMF (Industrial manufacture); TEM (Technical or engineered material  
use); PREP (Preparation); USES (Uses)  
(red dye; production of anionic monoazo dyes for paper)  
RN 656240-19-6 CAPLUS  
CN 2-Naphthalenesulfonic acid, 7-[[[4,6-bis[(2-hydroxyethyl)amino]-1,3,5-  
triazin-2-yl]amino]-4-hydroxy-3-[(6-sulfo-2-naphthalenyl)azo]- (9C1) (CA  
INDEX NAME)



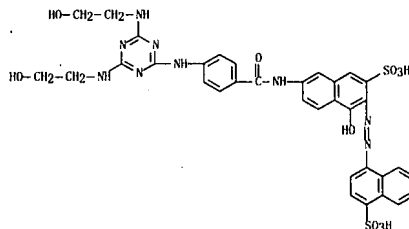
RN 656240-20-9 CAPLUS  
CN 2-Naphthalenesulfonic acid, 7-[[[4,6-bis[(2-hydroxyethyl)amino]-1,3,5-  
triazin-2-yl]amino]-4-hydroxy-3-[(7-sulfo-2-naphthalenyl)azo]- (9C1) (CA  
INDEX NAME)

L4 ANSWER 10 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

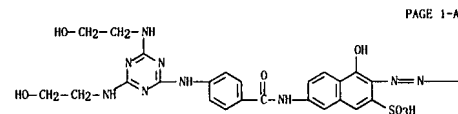
L4 ANSWER 10 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 656240-21-0 CAPLUS  
CN 1-Naphthalenesulfonic acid, 4-[[[6-[[[4-[[4,6-bis[(2-hydroxyethyl)amino]-  
1,3,5-triazin-2-yl]amino]benzoyl]amino]-1-hydroxy-3-sulfo-2-  
naphthalenyl]azo]- (9C1) (CA INDEX NAME)



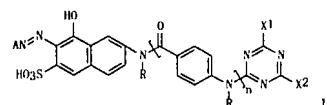
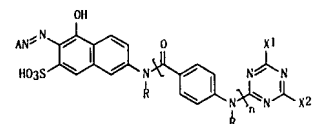
RN 656240-22-1 CAPLUS  
CN 2-Naphthalenesulfonic acid, 7-[[[4-[[[4,6-bis[(2-hydroxyethyl)amino]-1,3,5-  
triazin-2-yl]amino]benzoyl]amino]-4-hydroxy-3-[(6-sulfo-2-  
naphthalenyl)azo]- (9C1) (CA INDEX NAME)



L4 ANSWER 11 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN  
ACCESSION NUMBER: 2003:97478 CAPLUS  
DOCUMENT NUMBER: 138:138767  
TITLE: Azo dyes incorporating anionic and cationic groups,  
their production and their use on paper  
INVENTOR(S): Lonnartz, Michael; Kaeser, Doelf; Weiss, Sandra  
PATENT ASSIGNEE(S): Ciba Specialty Chemicals Holding Inc., Swiss  
SOURCE: PCT Int. Appl., 56 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003010239	A1	20030206	WO 2002-EP7732	20020711
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2452522	A1	20030206	CA 2002-2452522	20020711
AU 2002331248	A1	20030217	AU 2002-331248	20020711
BR 2002011272	A	20040803	BR 2002-11272	20020711
EP 1442082	A1	20040804	EP 2002-767198	20020711
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK				
CN 1533416	A	20040929	CN 2002-814586	20020711
JP 2004536202	T	20041202	JP 2003-515896	20020711
ZA 2003009589	A	20040628	ZA 2003-9589	20031210
US 2004205912	A1	20041021	US 2004-484135	20040117
US 7066969	B2	20060627		
IN 2004CN00329	A	20051223	IN 2004-CN329	20040217
PRIORITY APPL. INFO.:				
			EP 2001-810719	A 20010720
			WO 2002-EP7732	W 20020711

OTHER SOURCE(S): MARPAT 138:138767  
GRAPHIC IMAGE:



L4 ANSWER 11 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

L4 ANSWER 11 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

## ABSTRACT:

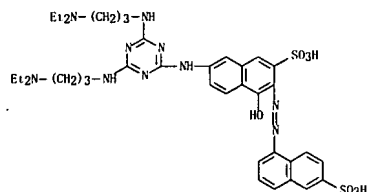
The invention relates to azo dyes (I and/or II: A = optionally substituted benzenesulfonic acid group; R = H, optionally substituted C1-4-alkyl; X1, X2 = N-containing group; n = 0, 1), the compds. being in an internal or external salt form. The dyes are prepared using ANH2 as the diazo components. The dyes are predominantly red and show high degrees of dyeing exhaustion and fastness to water and light. In an example, the condensation product of cyanuric chloride with 3-(diethylamino)propylamine and 6-amino-1-naphthol-3-sulfonic acid (1:2:1) was prepared and coupled with diazotized 1-naphthylamine-6-sulfonic acid to give a red dye.

IT 494754-53-9P

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(red dye; production of red azo dyes incorporating anionic and cationic groups for use on paper)

RN 494754-53-9 CAPLUS

CN 2-Naphthalenesulfonic acid, 7-[[4,6-bis[[3-(diethylamino)propyl]amino]-1,3,5-triazin-2-yl]amino]-4-hydroxy-3-[(6-sulfo-1-naphthalenyl)azo]- (9C1)  
(CA INDEX NAME)

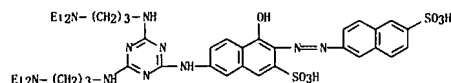


IT 494754-54-0P

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(scarlet dye; production of red azo dyes incorporating anionic and cationic groups for use on paper)

RN 494754-54-0 CAPLUS

CN 2-Naphthalenesulfonic acid, 7-[[4,6-bis[[3-(diethylamino)propyl]amino]-1,3,5-triazin-2-yl]amino]-4-hydroxy-3-[(6-sulfo-2-naphthalenyl)azo]- (9C1)  
(CA INDEX NAME)



REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS

L4 ANSWER 12 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2000:839114 CAPLUS

DOCUMENT NUMBER: 134:18553

TITLE: Water-soluble reactive cyanamidotriazine vinyl sulfone

INVENTOR(S): dyes, their production and their use

PATENT ASSIGNEE(S): Dannheim, Jorg; Ehrenberg, Stefan

SOURCE: Dystar Textilfarben GmbH &amp; Co. Deutschland Kg, Germany

DOCUMENT TYPE: Eur. Pat. Appl., 39 pp.

LANGUAGE: CODEN: EPXXDW

FAMILY ACC. NUM. COUNT: Patent

PATENT INFORMATION: German

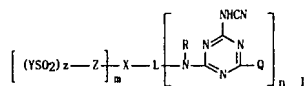
PATENT INFORMATION: i

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1055710	A1	20001129	EP 2000-110339	20000513
EP 1055710	B1	20040811		
R: AT, BE, CH, DE, DK, ES, FR, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
DE 19923989	A1	20001130	DE 1999-19923989	19990526
AT 273350	T	20040815	AT 2000-110339	20000513
PT 1055710	T	20041130	PT 2000-110339	20000513
ES 2224963	T3	20050316	ES 2000-110339	20000513
US 6444794	B1	20020903	US 2000-576701	20000522
TW 263662	B	20061011	TW 2000-89109850	20000522
TR 200001490	A2	20001221	TR 2000-1490	20000524
JP 2001019867	A	20010123	JP 2000-155655	20000526
			DE 1999-19923989	A 19990526

PRIORITY APPL. INFO.: CASREACT 134:18553; MARPAT 134:18553

OTHER SOURCE(S):

GRAPHIC IMAGE:



## ABSTRACT:

Reactive dyes (I: L = azo or other chromophore, Q = amino group containing vinyl sulfone or vinyl sulfone-generating moiety; R = H, optionally substituted C1-4-alkyl or C2-5-alkoxycarbonyl; X = connecting group containing N; Y = vinyl or vinyl-generating group; Z = direct bond or organic connecting group; n = 1, 2; m = 0-2; z = 1, 2) are obtained for dyeing and printing of cotton. I have improved fastness and application properties. In an example, 2-chloro-4-cyanamido-6-[N-methyl-N-(sulfoethyl)sulfonyl]ethylamino-1,3,5-triazine was condensed with 1-amino-8-naphthol-3,6-disulfonic acid and the product was coupled with diazotized 4-(sulfoethylsulfonyl)aniline to give a dye ( $\lambda_{max}$  520 nm), bluish red on cotton.

IT 309715-11-5P

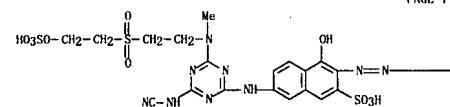
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(orange dye; production of reactive cyanamidotriazine vinyl sulfone dyes)

RN 309715-11-5 CAPLUS

CN 1,5-Naphthalenedisulfonic acid, 2-[[6-[[4-(cyanomino)-6-[methyl[2-[[2-(sulfoxy)ethyl]sulfonyl]ethyl]amino]-1,3,5-triazin-2-yl]amino]-1-hydroxy-3-sulfo-2-naphthalenyl]azo]-, tetrasodium salt (9C1) (CA INDEX NAME)

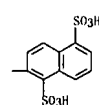
L4 ANSWER 12 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 1-A



●4 Na

PAGE 1-B



REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT



14 ANSWER 13 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1998:199014 CAPLUS

DOCUMENT NUMBER: 128:289521

TITLE: Polarographic and voltammetric determination of triazine-based reactive azo dyes with 4-carboxypyridyl and 1,4-diazabicyclo[2,2,2]octanyl leaving groups

AUTHOR(S): Fogg, Arnold G.; Zano, M. V. B.; Yusoff, A. Rahim H.

CORPORATE SOURCE: M. Ahmad, Rahmalan; Berek, Jiri; Zima, Jiri; Chemistry Department, Loughborough University of Technology, Leicestershire, LE11 3TU, UK

SOURCE: Analytica Chimica Acta (1998), 362(2-3), 235-240

CODEN: ACACAM; ISSN: 0003-2670

PUBLISHER: Elsevier Science B.V.

DOCUMENT TYPE: Journal

LANGUAGE: English

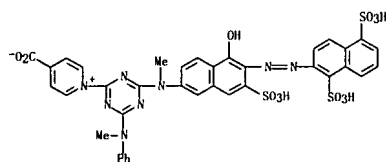
ABSTRACT: D.c. and differential pulse polarograms of reactive triazine-based azo dyes containing 4-carboxypyridyl and 1,4-diazabicyclo[2,2,2]octanyl (DABCO) leaving groups show one wave or peak corresponding to reduction of the azo group and other waves or peaks at more neg. potentials corresponding to the reduction of reactive groups. Optimum conditions were found for polarog. and voltammetric determination at submicromolar concns. of the test dyes based on azo group reduction. The peaks corresponding to the reduction of the reactive group can be used for monitoring the hydrolysis of the test dyes.

IT 132060-26-5 205747-00-8

RL: ANT (Analyte); PEP (Physical, engineering or chemical process); ANST (Analytical study); PROC (Process)  
(polarog. and voltammetric determination of triazine-based reactive azo dyes with 4-carboxypyridyl and 1,4-diazabicyclo[2,2,2]octanyl leaving groups)

RN 132060-26-5 CAPLUS

CN Pyridinium, 4-carboxy-1-[4-[[6-[[1,5-disulfo-2-naphthalenyl]azo]-5-hydroxy-7-sulfo-2-naphthalenyl]methylamino]-6-(methylphenylamino)-1,3,5-triazin-2-yl]-, inner salt (9C1) (CA INDEX NAME)



RN 205747-00-8 CAPLUS

CN 4-Aza-1-azoniabicyclo[2,2,2]octane, 1-[4-[[6-[[1,5-disulfo-2-naphthalenyl]azo]-5-hydroxy-7-sulfo-2-naphthalenyl]methylamino]-6-(methylphenylamino)-1,3,5-triazin-2-yl]-, inner salt (9C1) (CA INDEX NAME)

14 ANSWER 14 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1996:169303 CAPLUS

DOCUMENT NUMBER: 124:263652

TITLE: Water-based black recording liquids containing azo dyes

INVENTOR(S): Sano, Hideo; Yamada, Masahiro; Nishimura, Tooru;

TAKIMOTO, Hiroshi

PATENT ASSIGNEE(S): Mitsubishi Kagaku KK, Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 12 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

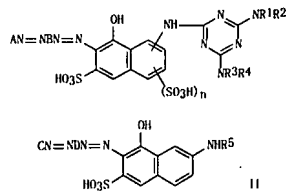
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 07331145	A	19951219	JP 1994-125100	19940607
JP 3371542	B2	20030127		

PRIORITY APPLN. INFO.:

OTHER SOURCE(S): MARPAT 124:263652

GRAPHIC IMAGE:



ABSTRACT:

Title liqs., useful for ink-jet printing black inks, etc., contain aqueous medium and 21 1-type azo dye and 21 11-type azo dyes (as free acids: A, C = (substituted) Ph, (substituted) naphthyl; B, D = (substituted) phenylene, (substituted) naphthylene; R1-5 = H, C1-18 alkyl, C1-18 alkenyl, aryl, aralkyl, cycloalkyl, heterocycle; which may be substituted; 21 R1-4 are carboxyl-substituted; n = 0-1). The liqs. may comprise water 35-93, water-soluble organic solvents 5-50, and the dyes 2-8%.

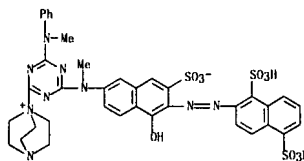
IT 175466-19-0 175466-22-5

RL: TEM (Technical or engineered material use); USES (Uses)  
(black water-based jet printing inks containing diazo dyes)

RN 175466-19-0 CAPLUS

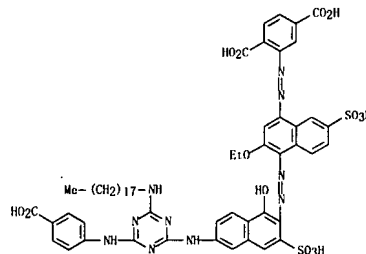
CN 1,4-Benzenedicarboxylic acid, 2-[[4-[[4-(4-carboxyphenyl)amino]-6-(octadecylamino)-1,3,5-triazin-2-yl]amino]-1-hydroxy-3-sulfo-2-naphthalenyl]azo]-3-ethoxy-7-sulfo-1-naphthalenyl]azo]- (9C1) (CA INDEX NAME)

14 ANSWER 13 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



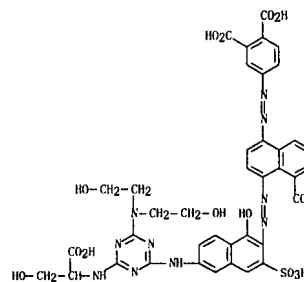
REFERENCE COUNT: 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

14 ANSWER 14 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 175466-22-5 CAPLUS

CN 1,2-Benzenedicarboxylic acid, 4-[[4-[[6-[[bis(2-hydroxyethyl)amino]-6-[(1-carboxy-2-hydroxyethyl)amino]-1,3,5-triazin-2-yl]amino]-1-hydroxy-3-sulfo-2-naphthalenyl]azo]-5-carboxy-1-naphthalenyl]azo]- (9C1) (CA INDEX NAME)

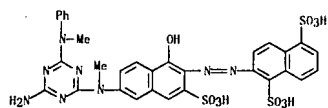


L4 ANSWER 15 OF 76 CAPLUS COPYRIGHT 2007 ACS ON STN

ACCESSION NUMBER: 1996:104067 CAPLUS  
 DOCUMENT NUMBER: 124:178854  
 TITLE: Polarographic and voltammetric determination of selected triazine-based azo dyes with different reactive groups  
 AUTHOR(S): Barek, Jiri; Fogg, Arnold G.; Moreira, Josino C.; Zanoni, M. Valnice B.; Zima, Jiri  
 CORPORATE SOURCE: UNESCO Laboratory of Environmental Electrochemistry, Department of Analytical Chemistry, Charles University, Prague, 12840/2, Czech  
 SOURCE: Analytica Chimica Acta (1996), 320(1), 31-42  
 CODEN: ACACAM; ISSN: 0003-2670  
 PUBLISHER: Elsevier  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 ABSTRACT:

Mechanisms are suggested for the polarog. reduction of five triazinyl azo dyes differing only in their potentially reactive group, and optimum conditions are given for their polarog. and voltammetric determination. The limit of determination using a static mercury drop electrode was around  $1 \times 10^{-6}$  mol l<sup>-1</sup> for TAST polarog. and  $2 \times 10^{-8}$  mol l<sup>-1</sup> for differential pulse polarog. Using a hanging mercury drop electrode, the limit of determination was around  $1 \times 10^{-8}$  mol l<sup>-1</sup> for differential pulse voltammetry and around  $2 \times 10^{-10}$  mol l<sup>-1</sup> for adsorptive stripping voltammetry. The reduction process of the azo group is used in all cases. Two of the dyes, viz. -Cl and -SCH<sub>2</sub>CH<sub>2</sub>OH derivs., exhibit another reduction process at more neg. potentials, which is due to a 2e<sup>-</sup> reduction of the leaving group/triazine bond followed immediately by a 2e<sup>-</sup> reduction of a C-N bond in the triazine ring. With 3-carboxypyridyl, methoxy and amino derivs. the reduction in the triazine region is overlapped by the reduction of base electrolyte.

IT 174096-73-2 174096-75-4  
 RL: ANT (Analyte): ANST (Analytical study)  
 (polarog. and voltammetric determination of selected triazine-based azo dyes with different reactive groups)  
 RN 174096-73-2 CAPLUS  
 CN 1,5-naphthalenedisulfonic acid, 2-[[6-[[4-amino-6-(methylphenylamino)-1,3,5-triazin-2-yl]methylamino]-1-hydroxy-3-sulfo-2-naphthalenyl]azo]- (9C1) (CA INDEX NAME)



RN 174096-75-4 CAPLUS  
 CN Pyridinium, 3-carboxy-1-[4-[[6-[[1,5-disulfo-2-naphthalenyl]azo]-5-hydroxy-7-sulfo-2-naphthalenyl]methylamino]-6-(methylphenylamino)-1,3,5-triazin-2-yl]-, inner salt (9C1) (CA INDEX NAME)

L4 ANSWER 16 OF 76 CAPLUS COPYRIGHT 2007 ACS ON STN

ACCESSION NUMBER: 1995:785207 CAPLUS  
 DOCUMENT NUMBER: 123:343739  
 TITLE: Water-based recording liquids containing bistriazine-containing tetraazo dyes  
 INVENTOR(S): Sano, Hideo; Sato, Nobuyoshi; Murata, Jukichi  
 PATENT ASSIGNEE(S): Mitsubishi Kagaku KK, Japan; Mitsubishi Chemical Corp.  
 SOURCE: Jpn. Kokai Tokkyo Koho, 15 pp.  
 CODEN: JXXXXF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 07150088	A	19950613	JP 1993-301926	19931201
JP 3511652	B2	20040329	JP 1993-301926	19931201

PRIORITY APPLN. INFO.:  
 OTHER SOURCE(S): MARPAT 123:343739  
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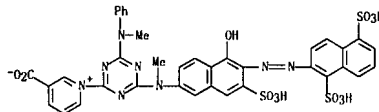
\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

ABSTRACT:  
 Title liqs., useful for ink-jet printer, etc., contain water-based mediums and 21 dyes selected from tetraazo compds. I as free acids [A, D = (substituted) Ph, naphthyl; B, C = (substituted) phenylene, naphthylene; R1-4 = H, (substituted) Cl-18 alkyl, (substituted) Cl-18 alkenyl, (substituted) aryl, (substituted) aralkyl, (substituted) cycloalkyl, (substituted) heterocycle; Y = divalent linking group; m, n = 0, 1]. Thus, diethylene glycol 10, iso-Pr alc. 3, tetrazo dye 11 3, and balance water were mixed to give title liquid providing clear bluish black dots in ink-jet printing.

IT 170694-14-1 170694-17-4 170694-26-5  
 170694-28-7  
 RL: TM (Technical or engineered material use): USES (Uses)  
 (dyes; inks containing water-based mediums and bistriazine-containing tetraazo dyes)  
 RN 170694-14-1 CAPLUS  
 CN 1,4-Benzenedicarboxylic acid, 2,2'-[[1,3-phenylenebis[methyleneimino[6-[[4-carboxycyclohexyl]amino]-1,3,5-triazine-4,2-diyl]imino[1-hydroxy-3-sulfo-6,2-naphthalenediyl]azo[3-methoxy-7-sulfo-4,1-naphthalenediyl]azo]]bis- (9C1) (CA INDEX NAME)

L4 ANSWER 15 OF 76 CAPLUS COPYRIGHT 2007 ACS ON STN

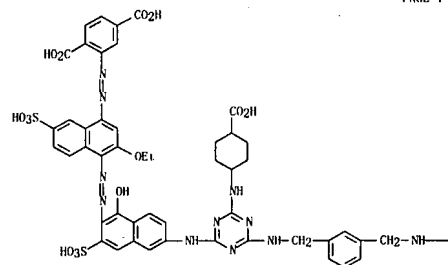
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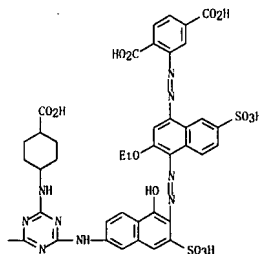
L4 ANSWER 16 OF 76 CAPLUS COPYRIGHT 2007 ACS ON STN

(Continued)

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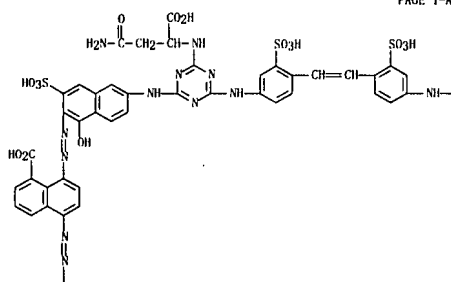
PAGE 1-B



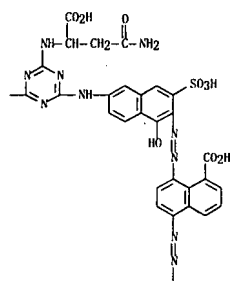
RN 170694-17-4 CAPLUS  
 CN 1,2-Benzenedicarboxylic acid, 4,4'-[[1,2-ethenediylbis[(3-sulfo-4,1-phenylene)imino[6-[[3-amino-1-carboxy-3-oxopropyl]amino]-1,3,5-triazine-4,2-diyl]imino[1-hydroxy-3-sulfo-6,2-naphthalenediyl]azo[5-carboxy-4,1-naphthalenediyl]azo]]bis- (9C1) (CA INDEX NAME)

L4 ANSWER 16 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 1-A

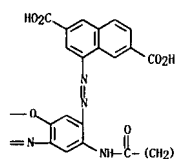


PAGE 1-B

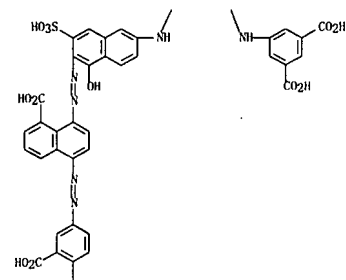


L4 ANSWER 16 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

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RN 170694-28-7 CAPLUS  
CN 1,2-Benzenedicarboxylic acid, 4-[[4-[[6-[[4-[[3-amino-1-carboxy-3-oxopropyl]amino]-6-[[4-[[2-[[4-[[3-amino-1-carboxy-3-oxopropyl]amino]-6-[[17-[[2-(1,1-dimethylethoxy)-5-(1,1-dimethylethyl)-4-[(1-sulfo-2-naphthalenyl)azo]phenyl]azo]-8-hydroxy-3,6-disulfo-1-naphthalenyl]amino]-1,3,5-triazin-2-yl]amino]-2-sulfonylphenyl]ethenyl]-3-sulfonyl]amino]-1,3,5-triazin-2-yl]amino]-1-hydroxy-3-sulfo-2-naphthalenyl]azo]-5-carboxy-1-naphthalenyl]azo]- (9CI) (CA INDEX NAME)

L4 ANSWER 16 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

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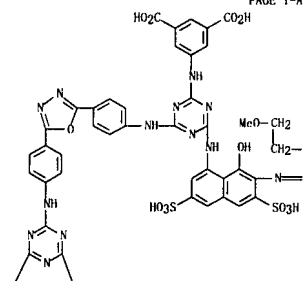


PAGE 2-B



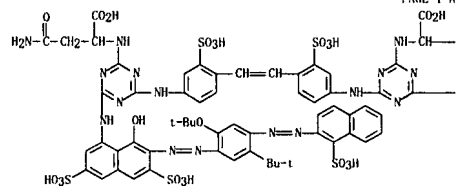
RN 170694-26-5 CAPLUS  
CN 2,6-Naphthalenedicarboxylic acid, 4-[[4-[[6-[[4-[[5-[[4-[[6-[[8-carboxy-4-[[3,4-dicarboxyphenyl]azo]-1-naphthalenyl]azo]-5-hydroxy-7-sulfo-2-naphthalenyl]amino]-6-[[3,5-dicarboxyphenyl]amino]-1,3,5-triazin-2-yl]amino]phenyl]-1,3,4-oxadiazol-2-yl]phenyl]amino]-6-[[3,5-dicarboxyphenyl]amino]-1,3,5-triazin-2-yl]amino]-1-hydroxy-3,6-disulfo-2-naphthalenyl]azo]-5-(2-methoxyethoxy)-2-[[1-oxoheptyl]amino]phenyl]azo]- (9CI) (CA INDEX NAME)

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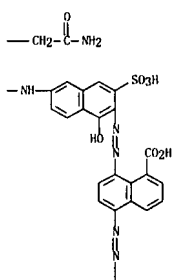


L4 ANSWER 16 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

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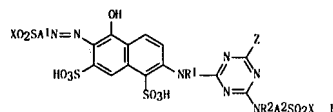
PAGE 2-B



L4 ANSWER 17 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1995:721482 CAPLUS  
 DOCUMENT NUMBER: 123-289596  
 TITLE: Water-soluble orange monoazo dyes with two vinyl sulfone groups  
 INVENTOR(S): Hibara, Toshio; Takahashi, Yosuke  
 PATENT ASSIGNEE(S): Hoechst Mitsubishi Kasei, Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.  
 CODEN: JXXXXF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 07102181	A	19950418	JP 1993-267886	19930930
PRIORITY APPLN. INFO.:			JP 1993-267886	19930930
OTHER SOURCE(S):			MARPAT 123:289596	
GRAPHIC IMAGE:				



## ABSTRACT:

The dyes, for cellulose, are (salts of) I [A1, A2 = (un)substituted phenylene, naphthylene; R1, R2 = H, lower alkyl; X = CH2 or precursor; Z = (un)substituted amino, OH, OR3; R3 = (un)substituted lower alkyl, (un)substituted Ph]. A cotton fabric was dyed in a bath containing monoazo dye I (X = C2H4OSO3H, A1 = A2 = 1,4-C6H4, R1 = H, R2 = Et, Z = morpholino) at 60° for 1 h to obtain orange cloth with buildup properly (1.2 g/0.3 g) 295.

IT 169502-38-9P

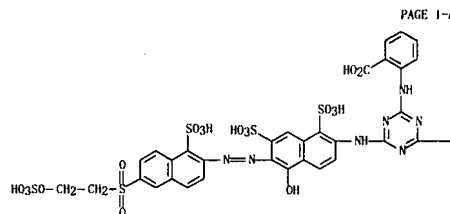
RL: IMP (Industrial manufacture): TEM (Technical or engineered material use); PREP (Preparation): USES (Uses)  
 (water-soluble orange monoazo dyes with two vinyl sulfone groups for dyeing of cellulosic fibers)

RN 169502-38-9 CAPLUS

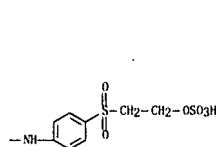
CN Benzoic acid, 2-[[4-[[5-hydroxy-1,7-disulfo-6-[[1-sulfo-6-[[2-(sulfoxyethyl)sulfonyl]-2-naphthalenyl]azo]-2-naphthalenyl]amino]-6-[[4-[[2-(sulfoxyethyl)sulfonyl]phenyl]amino]-1,3,5-triazin-2-yl]amino]-9C1]] (CA INDEX NAME)

L4 ANSWER 17 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN

(Continued)



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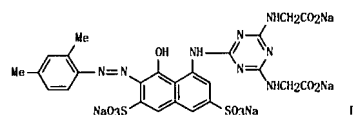
PAGE 1-B

L4 ANSWER 18 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1995:478248 CAPLUS  
 DOCUMENT NUMBER: 122:216574  
 TITLE: Azo dyes, inks containing them, and recording method, and instrument using the inks  
 INVENTOR(S): Eida, Tetsuyoshi; Nishiwaki, Osamu; Yamamoto, Takaou; Mafune, Kumiko  
 PATENT ASSIGNEE(S): Canon K. K., Japan  
 SOURCE: Eur. Pat. Appl., 70 pp.  
 CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 626428	A1	19941130	EP 1994-107608	19940517
EP 626428	B1	20001011		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE				
JP 06329931	A	19941129	JP 1993-116075	19930518
JP 06329944	A	19941129	JP 1993-116076	19930518
JP 06329932	A	19941129	JP 1993-116185	19930518
JP 06329945	A	19941129	JP 1993-116186	19930518
US 5466282	A	19951114	US 1994-241592	19940512
AT 196917	T	20001015	AT 1994-107608	19940517
PRIORITY APPLN. INFO.:			JP 1993-116075	A 19930518
			JP 1993-116076	A 19930518
			JP 1993-116185	A 19930518
			JP 1993-116186	A 19930518

OTHER SOURCE(S): MARPAT 122:216574  
 GRAPHIC IMAGE:



## ABSTRACT:

The azo dye contains a structural unit XY(R1)(R2)(R3)k [R1 is N(CH2CH2OH)2, NHCH2CH2OH, amino acid residue; R2 is H, OH, NH2, CN, oxo, N(CH2CH2OH)2, NHCH2CH2OH, amino acid residue; R3 is H, OH, NH2, CN, oxo; X is a linking group; Y is a 6-membered ring containing 2-3 N; k = 0, 1]. Inks containing these dyes provide images with high optical d. and negligible feathering of dots, permit fast fixing, and are waterfast when used in copying on plain paper. Thus, 2,4-Me2C6H3NH2 was diazotized and coupled with H acid under alkaline conditions, and the product was condensed consecutively with cyanuric chloride and glycine to give I. An ink formulation comprised diethylene glycol 15, 2-pyrrolidinone 5, EtOH 3, 1,3, and water 74 weight%, adjusted to pH 9.0-9.5.

IT 162093-70-1

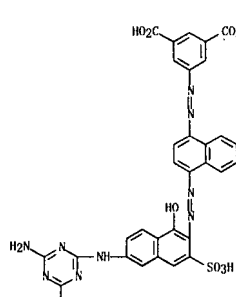
RL: TEM (Technical or engineered material use): USES (Uses)  
 (azo dyes for jet-printing inks)

RN 162093-70-1 CAPLUS

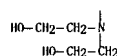
CN 1,3-Benzenedicarboxylic acid, 5-[[4-[[4-amino-6-[[bis(2-hydroxyethyl)amino]-1,3,5-triazin-2-yl]amino]-1-hydroxy-3-sulfo-2-naphthalenyl]azo]-1-naphthalenyl]azo]-, triazemonium salt (9C1) (CA INDEX NAME)

L4 ANSWER 18 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN

(Continued)



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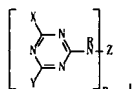


PAGE 2-A

● 3 NH3

L4 ANSWER 19 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN  
 ACCESSION NUMBER: 1994:485698 CAPLUS  
 DOCUMENT NUMBER: 121:85698  
 TITLE: Water-soluble reactive dyes: their preparation and use  
 INVENTOR(S): Beck, Thomas; Russ, Werner; Hubert, Wilhelm  
 PATENT ASSIGNEE(S): Hoechst A.-G., Germany  
 SOURCE: Eur. Pat. Appl., 101 pp.  
 CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 538785	A2	19930428	EP 1992-117908	19921020
EP 538785	A3	19930811		
EP 538785	B1	19970409		
R: BE, CH, DE, ES, FR, GB, IT, LI, NL				
IN 179027	A1	19970809	IN 1992-CA653	19920910
US 5231172	A	19930727	US 1992-964516	19921021
BR 9204125	A	19930504	BR 1992-4125	19921022
JP 05295285	A	19931109	JP 1992-284719	19921022
IN 178305	A1	19970322	IN 1992-CA777	19921023
PRIORITY APPLN. INFO.:			DE 1991-4134892	A 19911023
OTHER SOURCE(S):		MARPAT 121:85698		
GRAPHIC IMAGE:				



ABSTRACT:  
 The dyes (I: R = H, optionally substituted C1-4 alkyl; X' = sulfonamido; Y = amino group containing vinyl sulfone or precursor; Z = chromophore such as azo, anthraquinone, phthalocyanine, formazan, dioxazine, etc.; n = 1-2) are obtained for use on OH or COOH group-containing fabrics. Thus, 7-amino-4-hydroxy-3-(4-methoxy-2-sulfonylphenylazo)-2-naphthalenesulfonic acid was condensed with cyanuric chloride, followed by MeSO<sub>2</sub>NH<sub>2</sub>. The product was condensed with 3-HO<sub>3</sub>SOCH<sub>2</sub>CH<sub>2</sub>SO<sub>2</sub>C<sub>6</sub>H<sub>4</sub>NH<sub>2</sub> to give a dye (λ<sub>max</sub> 500 nm) providing fast brilliant scarlet shades.

IT 156108-22-4P 156108-50-8P 156108-51-9P  
 156108-52-0P 156108-53-1P 156108-54-2P  
 156108-55-3P 156108-56-4P 156108-57-5P  
 156108-58-6P 156108-59-7P 156108-60-0P  
 156108-61-1P 156108-34-7P 156108-35-8P  
 RL: (MF (Industrial manufacture); PREP (Preparation)  
 (preparation of, as orange dye for cotton)

RN 156108-22-4 CAPLUS  
 CN 1,5-Naphthalenedisulfonic acid, 2-[[1-hydroxy-6-[[methyl[4-[(methylsulfonyl)amino]-6-[[3-[[2-(sulfoxy)ethyl]sulfonyl]phenyl]amino]-1,3,5-triazin-2-yl]amino]-3-sulfo-2-naphthalenyl]azo]- (9C1) (CA INDEX NAME)

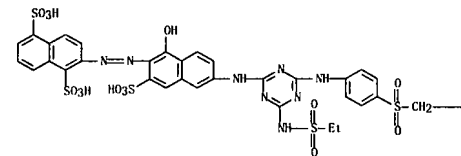
L4 ANSWER 19 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

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—CH<sub>2</sub>—OSO<sub>3</sub>H

RN 156108-51-9 CAPLUS  
 CN 1,5-Naphthalenedisulfonic acid, 2-[[6-[[4-[(ethylsulfonyl)amino]-6-[[4-[[2-(sulfoxy)ethyl]sulfonyl]phenyl]amino]-1,3,5-triazin-2-yl]amino]-1-hydroxy-3-sulfo-2-naphthalenyl]azo]- (9C1) (CA INDEX NAME)

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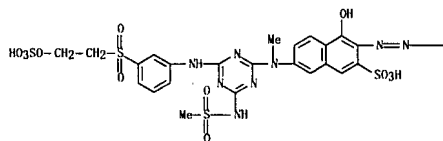
PAGE 1-B

—CH<sub>2</sub>—OSO<sub>3</sub>H

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L4 ANSWER 19 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

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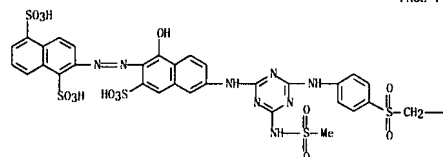


PAGE 1-B



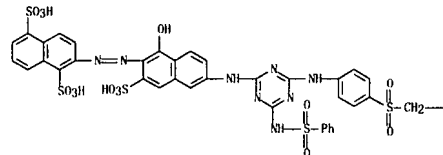
RN 156108-50-8 CAPLUS  
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L4 ANSWER 19 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

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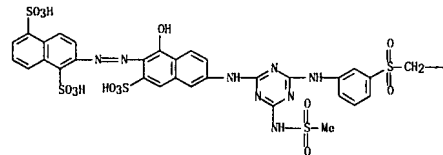


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—CH<sub>2</sub>—OSO<sub>3</sub>H

RN 156108-53-1 CAPLUS  
 CN 1,5-Naphthalenedisulfonic acid, 2-[[1-hydroxy-6-[[4-[(methylsulfonyl)amino]-6-[[3-[[2-(sulfoxy)ethyl]sulfonyl]phenyl]amino]-1,3,5-triazin-2-yl]amino]-3-sulfo-2-naphthalenyl]azo]- (9C1) (CA INDEX NAME)

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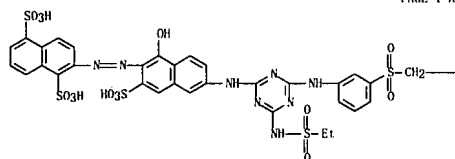
PAGE 1-B

—CH<sub>2</sub>—OSO<sub>3</sub>H

RN 156108-54-2 CAPLUS  
 CN 1,5-Naphthalenedisulfonic acid, 2-[[6-[[4-[(ethylsulfonyl)amino]-6-[[3-[[2-(sulfoxy)ethyl]sulfonyl]phenyl]amino]-1,3,5-triazin-2-yl]amino]-1-hydroxy-

L4 ANSWER 19 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)  
3-sulfo-2-naphthalenyl]azo]- (9C1) (CA INDEX NAME)

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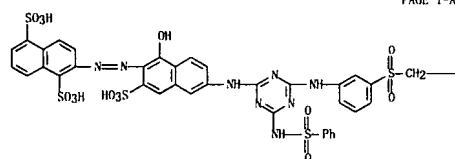


PAGE 1-B

-CH<sub>2</sub>-OSO<sub>3</sub>H

RN 156108-55-3 CAPLUS  
CN 1,5-Naphthalenedisulfonic acid, 2-[[1-hydroxy-6-[[4-[(phenylsulfonyl)amino]-6-[[3-[[2-(sulfoxy)ethyl]sulfonyl]propyl]amino]-1,3,5-triazin-2-yl]amino]-3-sulfo-2-naphthalenyl]azo]- (9C1) (CA INDEX NAME)

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-CH<sub>2</sub>-OSO<sub>3</sub>H

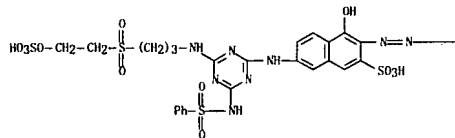
L4 ANSWER 19 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

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RN 156108-58-6 CAPLUS  
CN 1,5-Naphthalenedisulfonic acid, 2-[[1-hydroxy-6-[[4-[(phenylsulfonyl)amino]-6-[[3-[[2-(sulfoxy)ethyl]sulfonyl]propyl]amino]-1,3,5-triazin-2-yl]amino]-3-sulfo-2-naphthalenyl]azo]- (9C1) (CA INDEX NAME)

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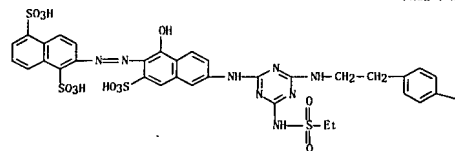


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RN 156108-59-7 CAPLUS  
CN 1,5-Naphthalenedisulfonic acid, 2-[[6-[[4-[(ethylsulfonyl)amino]-6-[[2-[[4-[[2-(sulfoxy)ethyl]sulfonyl]phenyl]ethyl]amino]-1,3,5-triazin-2-yl]amino]-1-hydroxy-3-sulfo-2-naphthalenyl]azo]- (9C1) (CA INDEX NAME)

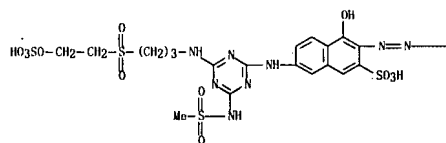
PAGE 1-A



L4 ANSWER 19 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 156108-56-4 CAPLUS  
CN 1,5-Naphthalenedisulfonic acid, 2-[[1-hydroxy-6-[[4-[(methylsulfonyl)amino]-6-[[3-[[2-(sulfoxy)ethyl]sulfonyl]propyl]amino]-1,3,5-triazin-2-yl]amino]-3-sulfo-2-naphthalenyl]azo]- (9C1) (CA INDEX NAME)

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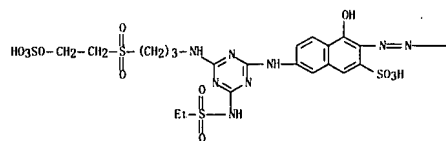


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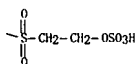
RN 156108-57-5 CAPLUS  
CN 1,5-Naphthalenedisulfonic acid, 2-[[6-[[4-[(ethylsulfonyl)amino]-6-[[3-[[2-(sulfoxy)ethyl]sulfonyl]propyl]amino]-1,3,5-triazin-2-yl]amino]-1-hydroxy-3-sulfo-2-naphthalenyl]azo]- (9C1) (CA INDEX NAME)

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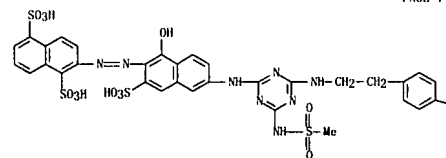
L4 ANSWER 19 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

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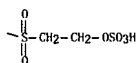


RN 156108-60-0 CAPLUS  
CN 1,5-Naphthalenedisulfonic acid, 2-[[1-hydroxy-6-[[4-[(methylsulfonyl)amino]-6-[[2-[[4-[[2-(sulfoxy)ethyl]sulfonyl]phenyl]ethyl]amino]-1,3,5-triazin-2-yl]amino]-3-sulfo-2-naphthalenyl]azo]- (9C1) (CA INDEX NAME)

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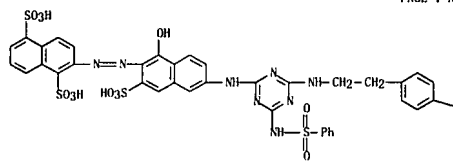
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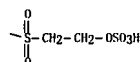
RN 156108-61-1 CAPLUS  
CN 1,5-Naphthalenedisulfonic acid, 2-[[1-hydroxy-6-[[4-[(phenylsulfonyl)amino]-6-[[2-[[4-[[2-(sulfoxy)ethyl]sulfonyl]phenyl]ethyl]amino]-1,3,5-triazin-2-yl]amino]-3-sulfo-2-naphthalenyl]azo]- (9C1) (CA INDEX NAME)

L4 ANSWER 19 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

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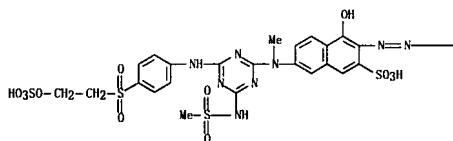


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RN 157654-34-7 CAPLUS  
 CN 1,5-Naphthalenedisulfonic acid, 2-[[1-hydroxy-6-[methyl[4-[(methylsulfonyl)amino]-6-[[4-[[2-(sulfoxy)ethyl]sulfonyl]phenyl]amino]-1,3,5-triazin-2-yl]amino]-3-sulfo-2-naphthalenyl]azo]- (9C1) (CA INDEX NAME)

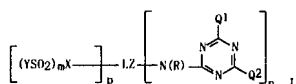
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L4 ANSWER 20 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN  
 ACCESSION NUMBER: 1994:56676 CAPLUS  
 DOCUMENT NUMBER: 120:56676  
 TITLE: Water-soluble reactive dyes, their manufacture and use  
 INVENTOR(S): Dannheim, Joerg; Russ, Werner Hubert  
 PATENT ASSIGNEE(S): Hoechst A.-G., Germany  
 SOURCE: Eur. Pat. Appl., 58 pp.  
 CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 548795	A2	19930630	EP 1992-121462	19921217
EP 548795	A3	19931027		
EP 548795	B1	19970709		
R: BE, CH, DE, ES, FR, GB, IT, LI, NL, PT				
BR 9205039	A	19930622	BR 1992-5039	19921217
ES 2104805	T3	19971016	ES 1992-121462	19921217
US 5334709	A	19940802	US 1992-993360	19921218
KR 212341	B1	19990802	KR 1992-24772	19921219
JP 05345863	A	19931227	JP 1992-340645	19921221
PRIORITY APPLN. INFO.:				
			DE 1991-4142420	A 19911220
			DE 1992-4204599	A 19920215
			DE 1992-4205326	A 19920221

OTHER SOURCE(S): MARPAT 120:56676  
 GRAPHIC IMAGE:



ABSTRACT:  
 The dyes 1 II. = direct link, N-containing connecting group; Q1, Q2 = organic group; R = H, (un)substituted C1-4 alkyl; X = direct bond, organic connecting group; Y = vinyl or precursor; Z = dye residue; m, n, p = 1, 2] are obtained for dyeing of cellulosics in fast shades. Thus, MeOH, cyanuric chloride, and 3-H2NC6H4SO3H were condensed, and the resulting monochlorotriazine was condensed with 3,5-disulfo-1-amino-8-naphthol. The product was coupled with diazotized 4-HO3SOCH2CH2SO2C6H4NH2 to provide a dye (λmax 520 nm), fast red on textiles.

IT 151408-05-8P  
 RL: IMP (Industrial manufacture): PREP (Preparation)  
 (preparation of, as orange dye for cellulosic fibers)

RN 151408-05-8 CAPLUS  
 CN L-Alanine, N-[4-[[5-hydroxy-7-sulfo-6-[[1-sulfo-6-[[2-(sulfoxy)ethyl]sulfonyl]azo]-2-naphthalenyl]amino]-6-[(3-sulfoxy)ethyl]sulfonyl]-1,3,5-triazin-2-yl]- (9C1) (CA INDEX NAME)

Absolute stereochemistry.  
 Double bond geometry unknown.

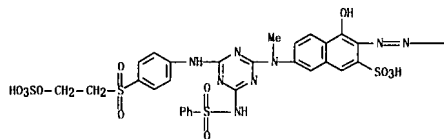
L4 ANSWER 19 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

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RN 157654-35-8 CAPLUS  
 CN 1,5-Naphthalenedisulfonic acid, 2-[[1-hydroxy-6-[methyl[4-[(phenylsulfonyl)amino]-6-[[4-[[2-(sulfoxy)ethyl]sulfonyl]phenyl]amino]-1,3,5-triazin-2-yl]amino]-3-sulfo-2-naphthalenyl]azo]- (9C1) (CA INDEX NAME)

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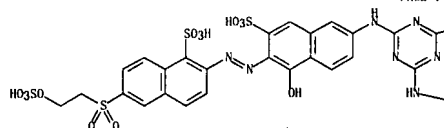


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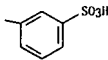
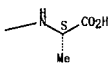


L4 ANSWER 20 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

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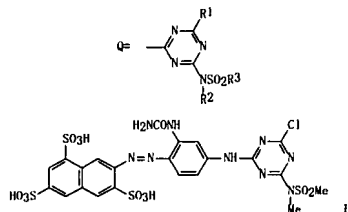
PAGE 1-B



L4 ANSWER 21 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN  
 ACCESSION NUMBER: 1993:497957 CAPLUS  
 DOCUMENT NUMBER: 119:97957  
 TITLE: Water-soluble reactive dyes, their preparation and use on cellulosic materials  
 INVENTOR(S): Bestock, Stephen Bernard; Hutchings, Michael Gordon; Taylor, John Anthony  
 PATENT ASSIGNEE(S): Imperial Chemical Industries PLC, UK  
 SOURCE: Eur. Pat. Appl., 22 pp.  
 CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 514001	A1	19921119	EP 1992-303299	19920414
R: AT, BE, CH, DE, ES, FR, GB, IT, LI, NL, PT				
US 5359043	A	19941025	US 1992-671473	19920421
CA 2066844	A1	19921118	CA 1992-2066844	19920422
PRIORITY APPLN. INFO.:			GB 1991-10689	A 19910517
OTHER SOURCE(S):		WARPAT 119:97957		

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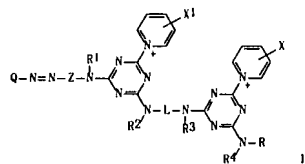
ABSTRACT:  
 The dyes contain a group Q [R1 = labile atom or group; R2, R3 = nonchromophoric (un)substituted aryl or alkyl]. Thus, MeSO2NMe was condensed with cyanuric chloride, and the product was condensed with 3-ureido-4-(3,6,8-trisulfo-2-naphthylazo)aniline to give reddish yellow I as the K salt.

IT 149438-52-8P  
 RI: PREP (Preparation)  
 (manufacture of, as water-soluble fiber-reactive dye)  
 RN 149438-52-8 CAPLUS  
 CN Pyridinium, 4-carboxy-1-[4-[[6-[(1,5-disulfo-2-naphthalenyl)azo]-5-hydroxy-7-sulfo-2-naphthalenyl]methylamino]-6-[methyl(methylsulfonyl)amino]-1,3,5-triazin-2-yl]]-, inner salt (9C1) (CA INDEX NAME)

L4 ANSWER 22 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN  
 ACCESSION NUMBER: 1993:193627 CAPLUS  
 DOCUMENT NUMBER: 118:193627  
 TITLE: Azo dyes with two reactive triazine rings, their use and phenylenediamine intermediates for their manufacture  
 INVENTOR(S): Renfrew, Andrew Hunter Morris; Taylor, John Anthony  
 PATENT ASSIGNEE(S): Imperial Chemical Industries PLC, UK  
 SOURCE: Eur. Pat. Appl., 10 pp.  
 CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 522716	A2	19930113	EP 1992-305395	19920612
EP 522716	A3	19940518		
R: AT, BE, CH, DE, ES, FR, GB, IT, LI, NL, PT				
CA 2072482	A1	19930110	CA 1992-2072482	19920626
JP 05222304	A	19930831	JP 1992-177931	19920706
US 5306813	A	19940426	US 1993-60884	19930122
PRIORITY APPLN. INFO.:			GB 1991-14837	A 19910709
OTHER SOURCE(S):		WARPAT 118:193627	US 1992-906393	B3 19920706

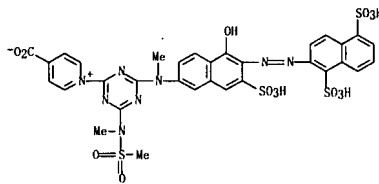
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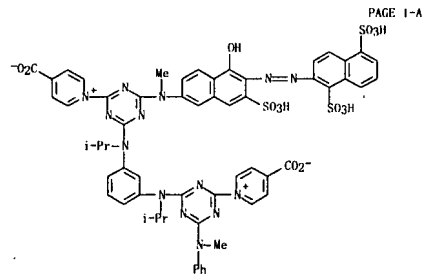
ABSTRACT:  
 Reactive dyes for cotton have the free acid form I [L = divalent organic group; Q = (un)substituted Ph or naphthyl; R = H, (un)substituted alkyl or aryl; R1-R4 = H, (un)substituted alkyl (R2 or R3 = H); X, X1 = H, substituent; Z = (un)substituted phenylene or naphthylene]. Thus, hydrogenation of m-phenylenediamine in acetone gave N,N'-diisopropyl-m-phenylenediamine, which was condensed with 7-[(dichloro-s-triazinyl)methylamino]-3-(1,5-disulfo-2-naphthylazo)-4-hydroxy-2-naphthalenesulfonic acid, followed by consecutive treatment with cyanuric chloride, PhNMe, isonicotinic acid, and NaCl to give the tri-Na salt of I [L = m-C6H4, Q = 1,5,2-(HO3S)2C10H5, R = Ph, R1 = R4 = Me, R2 = R3 = iso-Pr, X = X1 = 4-CO2H, Z = 1-hydroxy-3-sulfo-2,6-naphthylene].  $\lambda_{max}$  684 nm, bright orange on cotton.

IT 147236-63-3P  
 RI: IMF (Industrial manufacture); PREP (Preparation)  
 (preparation of, as orange dye for cotton)  
 RN 147236-63-3 CAPLUS  
 CN Pyridinium, 4-carboxy-1-[4-[[3-[[4-(4-carboxypyridinio)-6-[[6-[(1,5-disulfo-2-naphthalenyl)azo]-5-hydroxy-7-sulfo-2-naphthalenyl]methylamino]-

L4 ANSWER 21 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



L4 ANSWER 22 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)  
 1,3,5-triazin-2-yl]](1-methylethyl)amino]phenyl]](1-methylethyl)amino]-6-(methylphenylamino)-1,3,5-triazin-2-yl]]-, bis(inner salt), trisodium salt (9C1) (CA INDEX NAME)



●3 Na

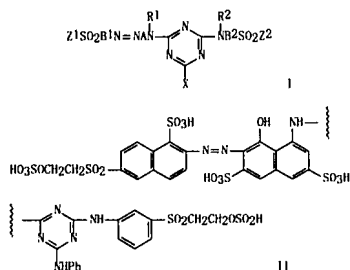
PAGE 2-A



L4 ANSWER 23 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN  
 ACCESSION NUMBER: 1992:552727 CAPLUS  
 DOCUMENT NUMBER: 117:152727  
 TITLE: Reactive dye compositions and dyeing and printing therewith  
 INVENTOR(S): Washimi, Takeshi; Harada, Naoki; Hashizume, Shuhei; Miki, Masayuki; Akahori, Kingo  
 PATENT ASSIGNEE(S): Sumitomo Chemical Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 11 pp.  
 CODEN: JRXAXF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 04108867	A	19920409	JP 1990-231537	19900829
PRIORITY APPLN. INFO.:			JP 1990-231537	19900829
OTHER SOURCE(S):		MARPAT 117:152727		

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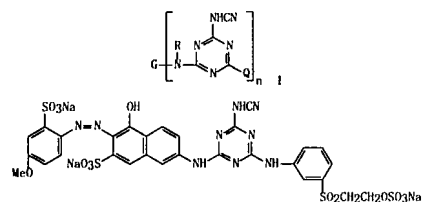
ABSTRACT:  
 Comps. for dyeing or printing cellulosic fibers, with good solubility in water and aqueous alkali, contain reactive dyes I (A = (un)substituted phenylene or naphthylene; one of R<sub>1</sub> and R<sub>2</sub> is (un)substituted phenylene, while the other is (sulfo)naphthylene; R<sub>1</sub>, R<sub>2</sub> = H, (un)substituted lower alkyl; X = NR<sub>3</sub>R<sub>4</sub>, OR<sub>5</sub>; R<sub>3</sub>-R<sub>5</sub> = H, (un)substituted alkyl or Ph or naphthyl; Z<sub>1</sub>, Z<sub>2</sub> = vinyl, CH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>; L = alkali-removable group) and alkylnaphthalenesulfonic acid-HCHO condensates. A level red cotton dyeing was obtained using a composition from a reactive dye of free-acid form II 65, methylnaphthalenesulfonic acid-HCHO condensate Na salt 34, and mineral oil emulsion 1 part.

IT: 143462-65-1  
 RL: USES (Uses)

L4 ANSWER 24 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN  
 ACCESSION NUMBER: 1991:451844 CAPLUS  
 DOCUMENT NUMBER: 115:51844  
 TITLE: Water-soluble fiber-reactive dyes containing (cyanomino)triazine residues  
 INVENTOR(S): Buech, Holger Michael; Haehnle, Reinhard; Springer, Hartmut  
 PATENT ASSIGNEE(S): Hoechst A.-G., Germany  
 SOURCE: PCT Int. Appl., 110 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 2  
 PATENT INFORMATION:

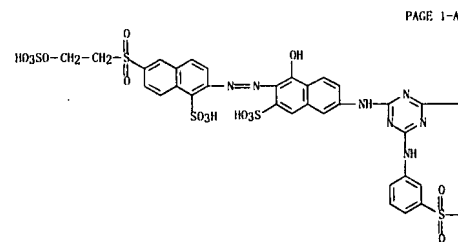
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9013604	A1	19901115	WO 1990-EP715	19900504
W: BR, DE, JP, KR, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, IT, LU, NL, SE				
DE 3915306	A1	19901115	DE 1989-3915306	19890510
DE 3930704	A1	19910321	DE 1989-3930704	19890914
EP 471702	A1	19920226	EP 1990-906926	19900504
EP 471702	B1	19931229		
R: AT, BE, CH, DE, ES, FR, GB, IT, LI, NL				
BR 9007365	A	19920512	BR 1990-7365	19900504
JP 04505174	T	19920910	JP 1990-506591	19900504
JP 07113089	B	19951206		
AT 99350	T	19940115	AT 1990-906926	19900504
US 5227475	A	19930713	US 1992-776305	19920110
PRIORITY APPLN. INFO.:			DE 1989-3915306	A 19890510
			DE 1989-3930704	A 19890914
			EP 1990-906926	A 19900504
			WO 1990-EP715	W 19900504

OTHER SOURCE(S): CASREACT 115:51844; MARPAT 115:51844  
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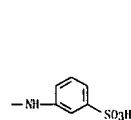


ABSTRACT:  
 The title dyes I [G = chromophoric residue; Q = amino group-containing fiber-reactive residue; R = H, (un)substituted C1-4 alkyl; n = 1, 2], useful for dyeing or printing of hydroxyl and/or carbonamide group-containing fabrics, are prepared. Thus, 3-(2'-sulfo-4'-methoxyphenylazo)-4-hydroxy-7-amino-2-naphthalene

L4 ANSWER 23 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)  
 (dye, contg. alkylnaphthalenesulfonic acid-formaldehyde condensate, for cotton)  
 RN 143462-65-1 CAPLUS  
 CN 1-Naphthalenesulfonic acid, 2-[[1-hydroxy-3-sulfo-6-[[4-[[3-[[2-(sulfooxy)ethyl]sulfonyl]phenyl]amino]-6-[[3-sulphophenyl]amino]-1,3,5-triazin-2-yl]amino]-2-naphthalenyl]azo]-6-[[2-(sulfooxy)ethyl]sulfonyl]- (9C1) (CA INDEX NAME)



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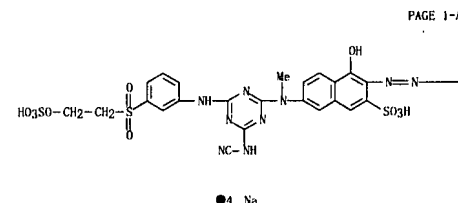


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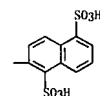
CH<sub>2</sub>-CH<sub>2</sub>-OSO<sub>3</sub>H

L4 ANSWER 24 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)  
 sulfonic acid was condensed with cyanuric chloride and cyanamide in the presence of NaOH, and condensed with 3-(β-sulfoethylsulfonyl)aniline, forming II, λ<sub>max</sub>(H<sub>2</sub>O) 500 nm, which dyed cotton fabrics fast scarlet-red shades.

IT 134947-53-8P  
 RL: PREP (Preparation)  
 (manufacture of, as orange reactive dye)  
 RN 134947-53-8 CAPLUS  
 CN 1,5-Naphthalenedisulfonic acid, 2-[[6-[[4-(cyanomino)-6-[[3-[[2-(sulfooxy)ethyl]sulfonyl]phenyl]amino]-1,3,5-triazin-2-yl]methylamino]-1-hydroxy-3-sulfo-2-naphthalenyl]azo]-, tetrasodium salt (9C1) (CA INDEX NAME)



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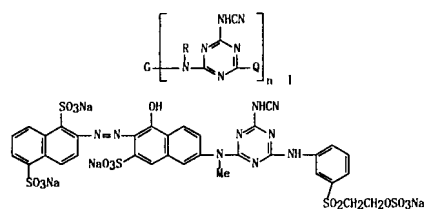


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L4 ANSWER 25 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN  
 ACCESSION NUMBER: 1991:451843 CAPLUS  
 DOCUMENT NUMBER: 115:51843  
 TITLE: Water-soluble triazinyl group-containing reactive dyes  
 INVENTOR(S): Bugch, Holger Michael; Haehnle, Reinhard; Springer, Hartmut  
 PATENT ASSIGNEE(S): Hoechst A.-G., Germany  
 SOURCE: Ger. Offen., 39 pp.  
 CODEN: GWXXBX  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 2  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 3915306	A1	19901115	DE 1989-3915306	19890510
WO 9013604	A1	19901115	WO 1990-EP715	19900504
W: BR, DE, JP, KR, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, IT, LU, NL, SE				
EP 471702	A1	19920226	EP 1990-906926	19900504
EP 471702	B1	19931229		
R: AT, BE, CH, DE, ES, FR, GB, IT, LI, NL				
BR 9007365	A	19920512	BR 1990-7365	19900504
JP 04505174	T	19920910	JP 1990-506591	19900504
JP 07113089	B	19951206		
AT 99350	T	19940115	AT 1990-906926	19900504
ES 2062522	T3	19941216	ES 1990-906926	19900504
US 5227475	A	19930713	US 1992-776305	19920110
PRIORITY APPLN. INFO.:				
			DE 1989-3915306	A 19890510
			DE 1989-3930704	A 19890914
			EP 1990-906926	A 19900504
			WO 1990-EP715	W 19900504

OTHER SOURCE(S): MARPAT 115:51843  
 GRAPHIC IMAGE:

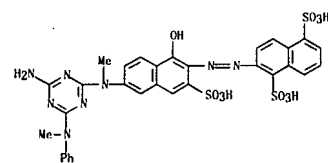


11

ABSTRACT:  
 The title dyes I [G = chromophoric residue; Q = amino group-containing fiber-reactive residue; R = H, (un)substituted C1-4 alkyl; n = 1, 2], useful for dyeing or printing of hydroxyl or carbonyl group-containing fabrics, are

L4 ANSWER 26 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN  
 ACCESSION NUMBER: 1991:431091 CAPLUS  
 DOCUMENT NUMBER: 115:31091  
 TITLE: Reactive dyes for cellulose. An unexpected hydrolysis product of a triazinyl reactive dye with a 3-carboxypyridine (nicotinic acid) leaving group  
 AUTHOR(S): Taylor, J. A.; Renfrew, A. H. M.  
 CORPORATE SOURCE: Fine Chem. Res. Cent., ICI Colours and Fine Chem., Blackley/Manchester, M9 3DA, UK  
 SOURCE: Journal of the Society of Dyers and Colourists (1990), 106(7-8), 230-4  
 CODEN: JSDCAA; ISSN: 0037-9859  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 ABSTRACT:  
 During a recent investigation into the relative rates of hydrolysis of a series of triazinyl reactive dyes bearing various leaving groups, an unexpected reaction was observed in the case of a nicotinic acid derivative. In model studies in dilute aqueous NaCO<sub>3</sub> solution, none of the expected hydroxytriazine was detected; instead the aminotriazine was formed cleanly and rapidly (pseudo-first-order rate constant k = 1.60 × 10<sup>-1</sup> min<sup>-1</sup>). The nicotinamide derivative behaved similarly. Other pyridinium derivs. examined behaved as expected, yielding the hydroxytriazine, but at much slower rates (e.g., k = 1.28 × 10<sup>-3</sup> min<sup>-1</sup> for the unsubstituted pyridinium salt). A possible mechanism to account for the rapid generation of aminotriazine was proposed and the significance of this observation to the dyeing of cotton with quaternized nicotinic acid dyes under basic and neutral conditions was discussed.

IT 134620-26-1P  
 RL: FORM (Formation, nonpreparative); PREP (Preparation)  
 (formation of, in hydrolysis of nicotinic acid derivative)  
 RN 134620-26-1 CAPLUS  
 CN 1,5-Naphthalenedisulfonic acid, 2-[[6-[[4-amino-6-(methylphenylamino)-1,3,5-triazin-2-yl]methylamino]-1-hydroxy-3-sulfo-2-naphthalenyl]azo]-, trisodium salt (9C1) (CA INDEX NAME)



●3 Na

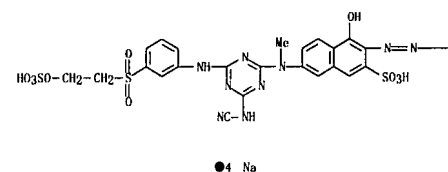
IT 134620-10-3 134620-25-0  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (hydrolysis of, amino product in, dyeing of cotton in relation to)  
 RN 134620-10-3 CAPLUS  
 CN Pyridinium, 3-carboxy-1-[4-[[6-[[1,5-disulfo-2-naphthalenyl]azo]-5-hydroxy-7-sulfo-2-naphthalenyl]methylamino]-6-(methylphenylamino)-1,3,5-triazin-2-yl]-, inner salt, disodium salt (9C1) (CA INDEX NAME)

L4 ANSWER 25 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)  
 prep. Thus, cyanuric chloride was condensed with cyanamide and 4-hydroxy-7-(methylamino)-2-naphthalenesulfonic acid in NaOH at pH 8.5-9, the condensate coupled with diazotized 2-amino-1,5-naphthalenedisulfonic acid, and the intermediate condensed with 3-(β-sulfoethylsulfonyl)aniline, forming 11, λ<sub>max</sub> 490 nm, which dyed cotton fabrics fast orange shades.

IT 134947-53-8P  
 RL: PREP (Preparation)  
 (manufacture of, as water-soluble orange reactive dye)

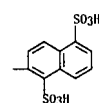
RN 134947-53-8 CAPLUS  
 CN 1,5-Naphthalenedisulfonic acid, 2-[[6-[[4-(cyanoamino)-6-[[3-[[2-(sulfoxyethyl)sulfonyl]phenyl]amino]-1,3,5-triazin-2-yl]methylamino]-1-hydroxy-3-sulfo-2-naphthalenyl]azo]-, tetrasodium salt (9C1) (CA INDEX NAME)

PAGE 1-A

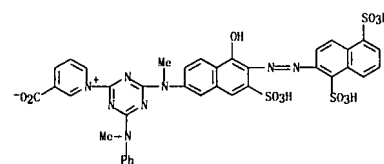


●4 Na

PAGE 1-B

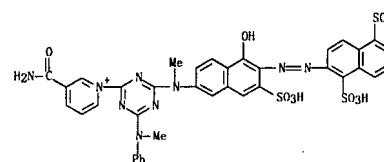


L4 ANSWER 26 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



●2 Na

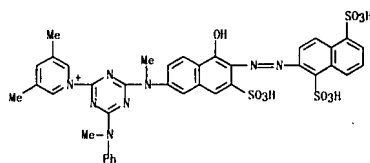
RN 134620-25-0 CAPLUS  
 CN Pyridinium, 3-(aminocarbonyl)-1-[4-[[6-[[1,5-disulfo-2-naphthalenyl]azo]-5-hydroxy-7-sulfo-2-naphthalenyl]methylamino]-6-(methylphenylamino)-1,3,5-triazin-2-yl]-, disodium salt (9C1) (CA INDEX NAME)



●2 Na

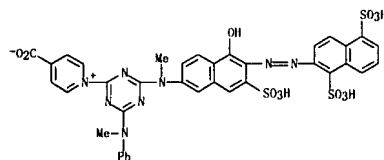
IT 134620-09-0 134620-23-8 134620-24-9  
 134644-72-7  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (hydrolysis of, hydroxy product in, dyeing of cotton in relation to)  
 RN 134620-09-0 CAPLUS  
 CN Pyridinium, 1-[4-[[6-[[1,5-disulfo-2-naphthalenyl]azo]-5-hydroxy-7-sulfo-2-naphthalenyl]methylamino]-6-(methylphenylamino)-1,3,5-triazin-2-yl]-3,5-dimethyl-, disodium salt (9C1) (CA INDEX NAME)

L4 ANSWER 26 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



●2 Na

RN 134620-23-8 CAPLUS  
CN Pyridinium, 4-carboxy-1-[4-[[6-[(1,5-disulfo-2-naphthalenyl)azo]-5-hydroxy-7-sulfo-2-naphthalenyl]methylamino]-6-(methylphenylamino)-1,3,5-triazin-2-yl]-, inner salt, disodium salt (9C1) (CA INDEX NAME)



●2 Na

RN 134620-24-9 CAPLUS  
CN Pyridinium, 4-carboxy-1-[4-[[6-[(1,5-disulfo-2-naphthalenyl)azo]-5-hydroxy-7-sulfo-2-naphthalenyl]methylamino]-6-(methylphenylamino)-1,3,5-triazin-2-yl]-, inner salt, disodium salt (9C1) (CA INDEX NAME)

L4 ANSWER 27 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN  
ACCESSION NUMBER: 1991:230678 CAPLUS  
DOCUMENT NUMBER: 114:230678  
TITLE: Manufacture of reactive azo dyes  
INVENTOR(S): Kojima, Masayoshi; Shirasaki, Toshitaka  
PATENT ASSIGNEE(S): Nippon Kayaku Co., Ltd., Japan  
SOURCE: Jpn. Kokai Tokkyo Koho, 10 pp.  
CODEN: JXXXXF  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 03007769	A	19910114	JP 1989-142123	19890606
JP 2534909	B2	19960918		

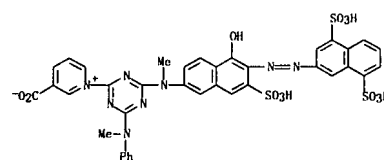
PRIORITY APPLN. INFO.: MARPAT 114:230678  
OTHER SOURCE(S):  
GRAPHIC IMAGE:

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

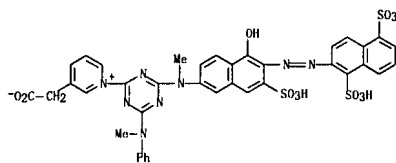
ABSTRACT:  
I or II (R = H, sulfo, Me; R1 = aliphatic, aromatic amine residue; R2 = H, Me, Et; R3 = H, Me) is quaternized with III (R4 = H, amino; R4CO at the 3- or 4-position), and the resulting pyridinium salts are subjected to diazo coupling to obtain reactive azo dyes IV and V (D1 = coupling component residue; D2 = diazo component residue). In this process, the quaternization is carried out during a short reaction time at a low temperature. Thus, 4-hydroxy-7-amino-2-naphthalenesulfonic acid was condensed with cyanuric chloride, 4-chloroaniline-3-sulfonic acid, and nicotinic acid, and the pyridinium salt intermediate was coupled with diazotized 4-(methoxy)aniline-2-sulfonic acid and salted to give VI, bright scarlet on cotton.

IT 133971-63-8P  
RL: PREP (Preparation)  
(manufacture of, as dyes for cotton)

RN 133971-63-8 CAPLUS  
CN Pyridinium, 3-carboxy-1-[4-[[6-[(1,5-disulfo-2-naphthalenyl)azo]-5-hydroxy-7-sulfo-2-naphthalenyl]methylamino]-6-(methylphenylamino)-1,3,5-triazin-2-yl]-, inner salt (9C1) (CA INDEX NAME)

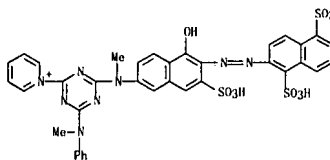


L4 ANSWER 26 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



●2 Na

RN 134644-72-7 CAPLUS  
CN Pyridinium, 1-[4-[[6-[(1,5-disulfo-2-naphthalenyl)azo]-5-hydroxy-7-sulfo-2-naphthalenyl]methylamino]-6-(methylphenylamino)-1,3,5-triazin-2-yl]-, disodium salt (9C1) (CA INDEX NAME)

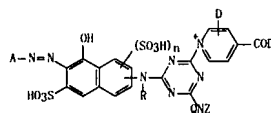


●2 Na

L4 ANSWER 28 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN  
ACCESSION NUMBER: 1991:83891 CAPLUS  
DOCUMENT NUMBER: 114:83891  
TITLE: Reactive azo dyes  
INVENTOR(S): Renfrew, Andrew Hunter Morris; Taylor, John Anthony  
PATENT ASSIGNEE(S): Imperial Chemical Industries PLC, UK  
SOURCE: Eur. Pat. Appl., 12 pp.  
CODEN: EPXXDW  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 395207	A1	19901031	EP 1990-302653	19900313
EP 395207	B1	19950712		
R: AT, RE, CH, DE, ES, FR, GB, GR, IT, LI, NL, SE				
ZA 9002065	A	19910925	ZA 1990-2065	19900316
IN 182521	A1	19990424	IN 1990-DE273	19900320
AU 9052067	A	19901025	AU 1990-52067	19900321
AU 617603	B2	19911128		
CA 2014718	A1	19901024	CA 1990-2014718	19900417
BR 9001876	A	19910618	BR 1990-1876	19900423
JP 02300265	A	19901212	JP 1990-106682	19900424
PRIORITY APPLN. INFO.: MARPAT 114:83891			GB 1989-9248	A 19890424

OTHER SOURCE(S):  
GRAPHIC IMAGE:

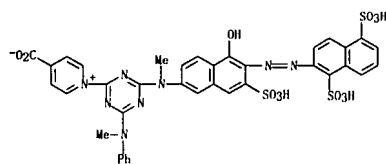


ABSTRACT:  
The title dyes I [A = diazo component residue; D = H, Cl, C1-4 alkoxy, SO<sub>3</sub>H, C1-4 alkyl; D1 = OH, N(R)R2; R1, R2 = H, (un)substituted C<sub>6</sub>-10 alkyl or alkenyl residue; Q = H, (un)substituted C<sub>6</sub>-10 alkyl or alkenyl residues; R = (un)substituted C<sub>6</sub>-10 alkyl or alkenyl residue; Z = (un)substituted aryl residue; n = 0, 1), useful for dyeing hydroxyl or amino group-containing textiles, are prepared. Thus, 1-hydroxy-2-[(1,5-disulfonaphth-2-ylazo)-6-N-methylamino-3-naphthalenesulfonic acid was reacted with cyanuric chloride and N-methylaniline, and intermediate reacted with isonicotinic acid, producing 1-hydroxy-2-[(1,5-disulfonaphth-2-ylazo)-6-N-[[4-(4-carboxypyridinium)-6-N-methyl-N-phenylamino-5-triazin-2-yl]-N-methylamino]-3-naphthalenesulfonic acid, which dyed cellulosic fabrics in fast orange shades.

IT 132060-26-5P  
RL: PREP (Preparation)  
(manufacture of, as reactive orange dye)

RN 132060-26-5 CAPLUS  
CN Pyridinium, 4-carboxy-1-[4-[[6-[(1,5-disulfo-2-naphthalenyl)azo]-5-hydroxy-7-sulfo-2-naphthalenyl]methylamino]-6-(methylphenylamino)-1,3,5-triazin-2-yl]-, inner salt (9C1) (CA INDEX NAME)

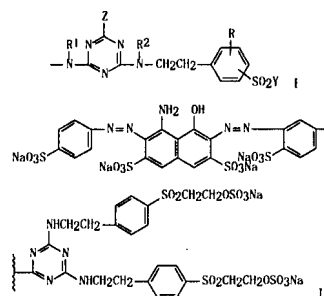
L4 ANSWER 28 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



L4 ANSWER 29 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1991:44934 CAPLUS  
 DOCUMENT NUMBER: 114:44934  
 TITLE: Water-soluble fiber-reactive dyes  
 INVENTOR(S): Springer, Hartmut; Scheidhauer, Patrick; Reichert, Karl Michael; Schwaiger, Guenther; Hussong, Kurt  
 PATENT ASSIGNEE(S): Hoechst A.-G., Germany  
 SOURCE: Ger. Offen., 49 pp.  
 CODEN: GWXXBX  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

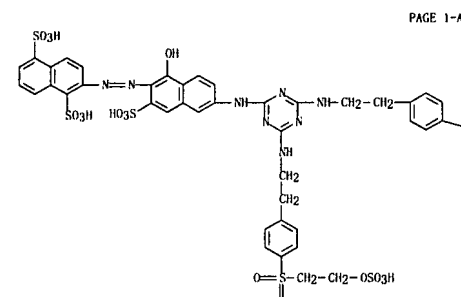
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 3843605	A1	19900628	DE 1988-3843605	19881223
EP 374911	A1	19900627	EP 1989-123639	19891221
R: BE, CH, DE, ES, FR, GB, IT, LI				
US 5128455	A	19920707	US 1989-454373	19891221
JP 0222461	A	19900905	JP 1989-331434	19891222
BR 8906703	A	19900911	BR 1989-6703	19891222
PRIORITY APPLN. INFO.:			DE 1988-3843605	A 19881223
OTHER SOURCE(S):		MARPAT 114:44934		
GRAPHIC IMAGE:				



ABSTRACT:  
 The title dyes, useful for dyeing or printing of hydroxyl and/or carbonamide group-containing fabrics, contain at least one [R = H, SO<sub>3</sub>H; R<sub>1</sub>, R<sub>2</sub> = H, Cl-4 alkyl; Y = CH<sub>2</sub>CH<sub>2</sub>, CH<sub>2</sub>CH<sub>2</sub>X; X = alkali-cleavable substituent; Z = OH, (un)substituted amino group or heterocyclic amine substituent]. 4-Aminobenzenesulfonic acid was diazotized, coupled with 1-amino-8-hydroxy-3,6-naphthalenedisulfonic acid to form a monoazo intermediate which was coupled with the diazotized

L4 ANSWER 29 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)  
 condensation product of cyanuric chloride with 1,3-phenylenediamine-4-sulfonic acid and 4-(β-hydroxyethylsulfonyl)-1-(β-aminoethyl)benzene, the mixt. neutralized with NaHCO<sub>3</sub>, and salted out with NaCl, producing II, λ<sub>max</sub> 594 nm, which dyed cotton fabrics fast navy blue shades.

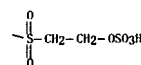
IT 130783-94-7P  
 RL: PREP (Preparation)  
 (manufacture of, as orange reactive dye)  
 RN 130783-94-7 CAPLUS  
 CN 1,5-Naphthalenedisulfonic acid, 2-[[6-[[4,6-bis[[2-[4-[[2-(sulfoxyethyl)sulfonyl]phenyl]ethylamino]-1,3,5-triazin-2-yl]amino]-1-hydroxy-3-sulfo-2-naphthalenyl]azo]-9CI] (CA INDEX NAME)



PAGE 1-A



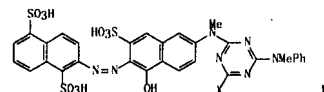
PAGE 1-B



PAGE 2-A

L4 ANSWER 30 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN

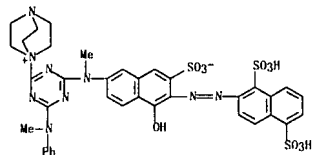
ACCESSION NUMBER: 1990:407999 CAPLUS  
 DOCUMENT NUMBER: 113:7999  
 TITLE: Reactive dyes for cellulose. Concurrent methoxide-hydroxide reactions of triazinyl reactive systems: a model system for assessment of potential fixation efficiency  
 AUTHOR(S): Renfrew, A. H. M.; Taylor, J. A.  
 CORPORATE SOURCE: ICI PLC, Colours and Fine Chem., Manchester, M9 3DA, UK  
 SOURCE: Journal of the Society of Dyers and Colourists (1989), 105(12), 441-5  
 CODEN: JSDCAA; ISSN: 0037-9859  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 GRAPHIC IMAGE:



ABSTRACT:  
 The reactive dyes I (X = Cl, F, SO<sub>3</sub>H) were prepared in addition to the reaction product of DABCO with I (X = Cl) and were added to an aqueous MeOH solution in the presence of base and the chemical reactivity to MeO<sup>-</sup> attack for all 4 compds. was determined from the product ratio. Measurements were made at 40° and under conditions of equal reactivity to hydroxide, as determined from Arrhenius plots. The selectivity results were in agreement with empirical observations for the fixation efficiency to cellulose of dyes carrying these reactive groups.

IT 127538-07-2P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation and solvolysis of, fixation assessment in relation to)  
 RN 127538-07-2 CAPLUS  
 CN 4-Aza-1-azoniabicyclo[2.2.2]octane, 1-[4-[[6-[[1,5-disulfo-2-naphthalenyl]azo]-5-hydroxy-7-sulfo-2-naphthalenyl]methylamino]-6-(methylphenylamino)-1,3,5-triazin-2-yl]-, inner salt, disodium salt (9CI) (CA INDEX NAME)

L4 ANSWER 30 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



● 2 Na

L4 ANSWER 31 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1989:635001 CAPLUS  
 DOCUMENT NUMBER: 111:235001  
 TITLE: Disazo compounds for dyeing cellulosic fibers  
 INVENTOR(S): Himeno, Kiyoshi; Hibara, Toshio  
 PATENT ASSIGNEE(S): Mitsubishi Kasei Corp., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.  
 CODEN: JKKXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 62250060	A	19871030	JP 1986-94363	19860423
JP 06019044	B	19940316		

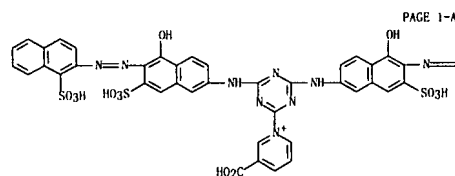
PRIORITY APPL. INFO.: JP 1986-94363 19860423  
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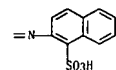
ABSTRACT:  
 Cellulosic fibers are dyed dark orange or scarlet with good perspiration and CI fastness by using water-soluble disazo compds. I (Dz = benzene or naphthalene ring, may be substituted with Me, OMe, or SO3H; R = H, Me, CONH2, CO2H; A = anion). Thus, disazo compound IV, prepared by condensation of monazo compds. III and 7-amino-4-hydroxy-3-[4-methoxy-2-sulphophenyl]azo]-2-naphthalenesulfonic acid, was treated with nicotinic acid to give a disazo compound I. Dz = Q, R = 3-CO2H, A = Cl (I) (λmax 495 nm in H2O), and a cotton/polyester blended fabric was dyed in an aqueous solution containing II, disperse dye Na2S04, and a buffer at 130°, washed, soaped, washed, and dried to give an evenly dyed dark scarlet fabric with good perspiration and CI fastness.

IT 113277-99-9P 113278-00-5P 113278-03-8P  
 RL: PREP. (Preparation)  
 (manufacture of, for dyeing cellulosic fabric with good perspiration and chlorine fastness)  
 RN 113277-99-9 CAPLUS  
 CN Pyridinium, 1-[4,6-bis[[5-hydroxy-7-sulfo-6-[(1-sulfo-2-naphthalenyl)azo]-2-naphthalenyl]amino]-1,3,5-triazin-2-yl]-3-carboxy-, chloride (9C1) (CA INDEX NAME)

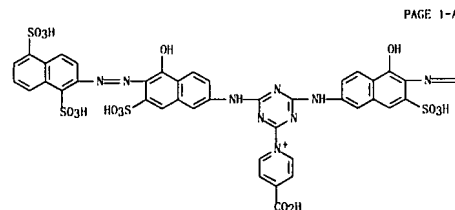
L4 ANSWER 31 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

● Cl<sup>-</sup>

PAGE 1-B

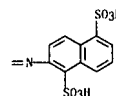


RN 113278-00-5 CAPLUS  
 CN Pyridinium, 1-[4,6-bis[[6-[(1,5-disulfo-2-naphthalenyl)azo]-5-hydroxy-7-sulfo-2-naphthalenyl]amino]-1,3,5-triazin-2-yl]-4-carboxy-, chloride (9C1) (CA INDEX NAME)

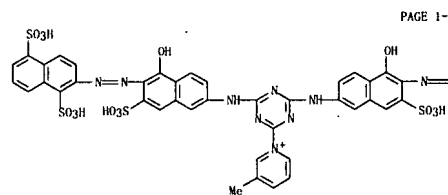
● Cl<sup>-</sup>

L4 ANSWER 31 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

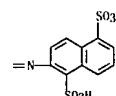
PAGE 1-B



RN 113278-03-8 CAPLUS  
 CN Pyridinium, 1-[4,6-bis[[6-[(1,5-disulfo-2-naphthalenyl)azo]-5-hydroxy-7-sulfo-2-naphthalenyl]amino]-1,3,5-triazin-2-yl]-3-methyl-, chloride (9C1) (CA INDEX NAME)

● Cl<sup>-</sup>

PAGE 1-B



L4 ANSWER 32 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN  
 ACCESSION NUMBER: 1989:441352 CAPLUS  
 DOCUMENT NUMBER: 111:41352  
 TITLE: Storable reactive dye compositions  
 INVENTOR(S): Yamamoto, Yosuke; Harada, Naoki; Imada, Kunihiko;  
 Omura, Takashi  
 PATENT ASSIGNEE(S): Sumitomo Chemical Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.  
 CODEN: JXXXXF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 63213574	A	19880906	JP 1987-45960	19870227
PRIORITY APPLN. INFO.:			JP 1987-45960	19870227
OTHER SOURCE(S):		MARPAT 111:41352		
GRAPHIC IMAGE:				

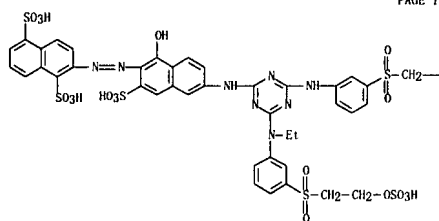
\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

ABSTRACT:  
 The title compns. based on reactive dyes I [D = sulfo groups-containing organic dye residue; R1, R2, R3 = H, (un)substituted lower alkyl; B1, B2 = (un)substituted phenylene, naphthylene; Z1, Z2 = vinyl, CH2CH2L; L = alkali-removable group; n = 1-3] contain 0-30% buffer and had pH (in 20-fold water) 3-8. An aqueous solution containing 17 parts II was treated with 2.8 parts NaH2PO4.2H2O, adjusted to pH 5.5 with 20% aqueous Na2CO3, and spray-dried to give a yellow dye composition storable >1 mo at 60°.

IT 116818-02-1  
 RL: USES (Uses)  
 (dye, storable compns., containing buffers)  
 RN 116818-02-1 CAPLUS  
 CN 1,5-Naphthalenedisulfonic acid, 2-[[6-[[4-[[ethyl[3-[[2-(sulfoxy)ethyl]sulfonyl]phenyl]amino]-6-[[3-[[2-(sulfoxy)ethyl]sulfonyl]phenyl]amino]-1,3,5-triazin-2-yl]amino]-1-hydroxy-3-sulfo-2-naphthalenyl]azo]- (9C1) (CA INDEX NAME)

L4 ANSWER 32 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

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-CH2-OSO3H

L4 ANSWER 33 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN  
 ACCESSION NUMBER: 1989:194585 CAPLUS  
 DOCUMENT NUMBER: 110:194585  
 TITLE: Dyeing of cellulosic fibers with reactive dyes with good reproducibility and leveling  
 INVENTOR(S): Imada, Kunihiko; Harada, Naoki; Omura, Takashi  
 PATENT ASSIGNEE(S): Sumitomo Chemical Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.  
 CODEN: JXXXXF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 63243387	A	19881011	JP 1987-79298	19870330
PRIORITY APPLN. INFO.:			JP 1987-79298	19870330
OTHER SOURCE(S):		MARPAT 110:194585		
GRAPHIC IMAGE:				

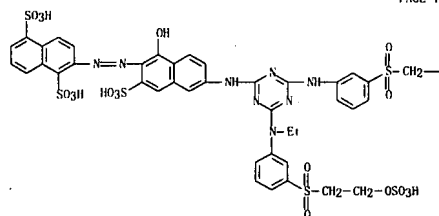
\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

ABSTRACT:  
 The title dyeing is done using 2I, II, and III [D1, D2, D3 = sulfo group-containing organic dye residue; R1-8 = (un)substituted alkyl; H: R1-4 = (un)substituted phenylene, naphthylene; Z1-4 = vinyl, CH2CH2L; L = alkali-removable group; X = Cl, Br, F, quaternary N-containing nonarom. or aromatic tertiary N compound residue; m, n, l = 1-3] at initial pH >9.5 which is increased to final value >11 with continuous addition of an alkali during dyeing. A cotton knit was dyed with 2:1 mixture of IV (R = m-NIC6H4SO2CH2CH2OSO3H) and IV (R = Cl) at initial pH 8.5 which was raised to 12.1 with NaOH over 20 min at 60° to give deep reddish orange dyeing with good reproducibility and leveling.

IT 116818-02-1  
 RL: USES (Uses)  
 (dyeing by, of cotton, basicity controlling in, for improved reproducibility and leveling)  
 RN 116818-02-1 CAPLUS  
 CN 1,5-Naphthalenedisulfonic acid, 2-[[6-[[4-[[ethyl[3-[[2-(sulfoxy)ethyl]sulfonyl]phenyl]amino]-6-[[3-[[2-(sulfoxy)ethyl]sulfonyl]phenyl]amino]-1,3,5-triazin-2-yl]amino]-1-hydroxy-3-sulfo-2-naphthalenyl]azo]- (9C1) (CA INDEX NAME)

L4 ANSWER 33 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

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PAGE 1-B

-CH2-OSO3H

L4 ANSWER 34 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN  
 ACCESSION NUMBER: 1989:156099 CAPLUS  
 DOCUMENT NUMBER: 110:156099  
 TITLE: Reactive tetrakisazo dyes  
 INVENTOR(S): Hibara, Toshio; Sanada, Yukiyo; Kunii, Keiko  
 PATENT ASSIGNEE(S): Mitsubishi Chemical Industries Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.  
 CODEN: JKKXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 62132965	A	19870616	JP 1985-272603	19851205
JP 06019042	B	19940316		

PRIORITY APPLN. INFO.: JP 1985-272603 19851205  
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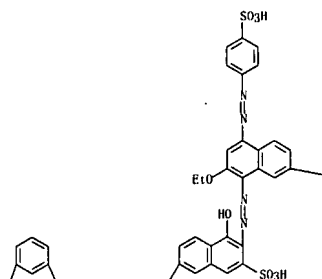
\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

ABSTRACT:  
 The title dyes, which can be used for cellulosic and N-containing fibers in the one-bath-one-step dyeing of polyester blends, having the free-acid form I [M = H, alkali metal; R<sup>1</sup> = H, halogen, lower alkyl, alkoxy, carboxy; R<sup>2</sup> = H, lower alkyl, alkoxy, sulfo; R<sup>3</sup> = H, lower alkyl, alkoxy, ureido, acylamino, sulfo; R<sup>4</sup> = H, lower alkyl; Z = halogen, pyridinio with or without D substituent, NR<sup>5</sup>XY; D = CO<sub>2</sub>M, CONH<sub>2</sub>; R<sup>5</sup> = H, (un)substituted lower alkyl; Y = SO<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>, SO<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>; X = alkali-removable group; X = (un)substituted phenylene, naphthylene; m = 1-3; n = 0, 1; rings A and B could be naphthalene], are prepared. Thus, 2-[[4-(sulfophenylazo)-2-sulfophenylazo]-6-(4,6-difluoro-s-triazin-2-ylamino)-1-naphthol-3-sulfonic acid was condensed with 6-amino-2-[[4-(4-sulfophenylazo)-2-sulfophenylazo]-1-naphthol-3-sulfonic acid and salted out with KCl to give II, which dyed cotton in a fast red shade.

IT 113275-B1-3P  
 RL: PREP (Preparation)  
 (manufacture of, as reactive dye for one-bath-one-step dyeing of polyester fiber blends)  
 RN 113275-B1-3 CAPLUS  
 CN 2-Naphthalenesulfonic acid, 7,7'-[[6-[[3-[[2-(sulfoxy)ethyl]sulfonyl]phenyl]amino]-1,3,5-triazine-2,4-diyl]diamo]bis[3-[[2-ethoxy-7-sulfo-4-[[4-(sulfophenylazo)-1-naphthalenyl]azo]-4-hydroxy- (9CI) (CA INDEX NAME)

L4 ANSWER 34 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

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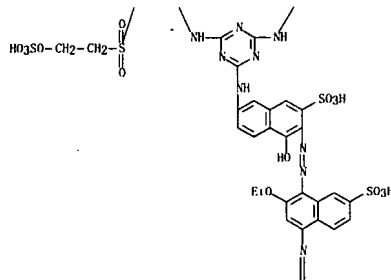


PAGE 1-B

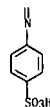
SO<sub>3</sub>H

L4 ANSWER 34 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

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PAGE 3-A

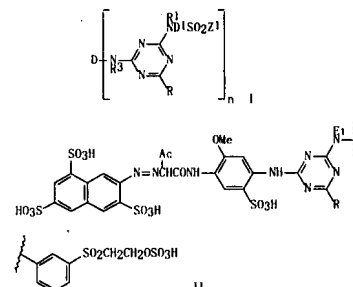


L4 ANSWER 35 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1989:136910 CAPLUS  
 DOCUMENT NUMBER: 110:136910  
 TITLE: Mixed reactive dye compositions and dyeing and printing therewith  
 INVENTOR(S): Harada, Naoki; Omura, Takashi; Imada, Kunihiro  
 PATENT ASSIGNEE(S): Sumitomo Chemical Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 19 pp.  
 CODEN: JKKXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 63210170	A	19880831	JP 1987-44616	19870226
JP 08003050	B	19960117		

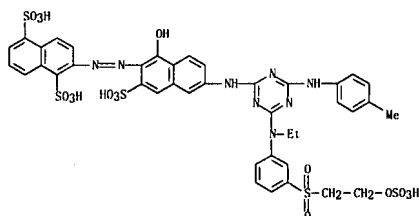
PRIORITY APPLN. INFO.: JP 1987-44616 19870226  
 OTHER SOURCE(S): MARPAT 110:136910  
 GRAPHIC IMAGE:



ABSTRACT:  
 The title compns., producing cotton dyeings with excellent leveling and reproducibility, contain at least of I [D = sulfo group-containing organic dye residue; D<sup>1</sup>, D<sup>2</sup> = (un)substituted phenylene, naphthylene; R = N(R<sup>2</sup>)O<sub>2</sub>SO<sub>2</sub>Z<sup>1</sup>; R<sup>1</sup>, R<sup>2</sup>, R<sup>3</sup>, Z<sup>1</sup>, Z<sup>2</sup> = vinyl; CH<sub>2</sub>CH<sub>2</sub>; L = alkali-removable group; n = 1-3], I (R = Cl), F, Br; quaternary N atom-containing tertiary N compound residue), and I (R = NR<sup>4</sup>R<sup>5</sup>; R<sup>4</sup> = H, (un)substituted lower alkyl; R<sup>5</sup> = (un)substituted Ph, naphthyl; A typical mixture producing level greenish-yellow cotton dyeing contained II (R = Cl) and II (R = m-NHC<sub>6</sub>H<sub>4</sub>SO<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>SO<sub>3</sub>H) in a 1:1 ratio.

IT 119043-49-1  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (dye mixts. containing, with good reproducibility and leveling, for cotton)  
 RN 119043-49-1 CAPLUS  
 CN 1,5-Naphthalenedisulfonic acid, 2-[[6-[[4-ethyl]3-[[2-

L4 ANSWER 35 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)  
(sulfooxy)ethyl)sulfonyl]phenyl]amino]-6-[[4-methylphenyl]amino]-1,3,5-triazin-2-yl]amino]-1-hydroxy-3-sulfo-2-naphthalenyl]azo]- (9C1) (CA INDEX NAME)



L4 ANSWER 36 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN  
ACCESSION NUMBER: 1989:116592 CAPLUS  
DOCUMENT NUMBER: 110:116592  
TITLE: Cold batch dyeing of cellulosic fibers with reactive dyes  
INVENTOR(S): Nishinaka, Masatake; Harada, Naoki; Imado, Kunihiko; Omura, Takashi  
PATENT ASSIGNEE(S): Sumitomo Chemical Co., Ltd., Japan  
SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.  
CODEN: JXAXAF  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 63211380	A	19880902	JP 1987-45959	19870227
PRIORITY APPL. INFO.:			JP 1987-45959	19870227
OTHER SOURCE(S):		MARPAT 110:116592		
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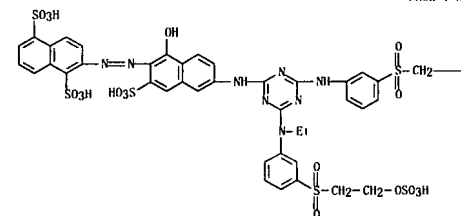
\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

ABSTRACT:  
Cellulosic fibers are dyed uniformly with good build-up, exhaustion, and acid hydrolysis fastness using reactive dyes having free acid form I [D = residue of organic dye having SO<sub>3</sub>H groups; R1-3 = H, (substituted) lower alkyl; R1-2 = C<sub>6</sub>H<sub>4</sub> which may be substituted with 1-2 Me, Et, MeO, EtO, Cl, Br, NO<sub>2</sub>, CO<sub>2</sub>H, and/or SO<sub>3</sub>H groups, naphthylene which may be substituted with SO<sub>3</sub>H groups; Z1-2 = vinyl, CH<sub>2</sub>CH<sub>2</sub>; L = alkali-eliminating group; n = 1-3]. Thus, cotton broadcloth was padded in a dye bath prepared from reactive dye II, Na<sub>2</sub>SO<sub>4</sub>, and NaOH, sealed in polyethylene film, stored for 5 h at 20° or 5° , or 20 h at 5° , and then washed, soaped, and dried to give a fabric with exhaustion 100, 98, and 99%, resp.

IT 116818-02-1  
RL: USES (Uses)  
(for cold pad-batch dyeing of cellulosic fibers, with good exhaustion)  
RN 116818-02-1 CAPLUS  
CN 1,5-Naphthalenedisulfonic acid, 2-[[6-[[4-[[ethyl]3-[[2-(sulfooxy)ethyl]sulfonyl]phenyl]amino]-6-[[3-[[2-(sulfooxy)ethyl]sulfonyl]phenyl]amino]-1,3,5-triazin-2-yl]amino]-1-hydroxy-3-sulfo-2-naphthalenyl]azo]- (9C1) (CA INDEX NAME)

L4 ANSWER 36 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

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--CH<sub>2</sub>--OSO<sub>3</sub>H

L4 ANSWER 37 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN  
ACCESSION NUMBER: 1989:116591 CAPLUS  
DOCUMENT NUMBER: 110:116591  
TITLE: Exhaust dyeing of cellulosic fibers with reactive dyes  
INVENTOR(S): Harada, Naoki; Imado, Kunihiko; Omura, Takashi  
PATENT ASSIGNEE(S): Sumitomo Chemical Co., Ltd., Japan  
SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.  
CODEN: JXAXAF  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

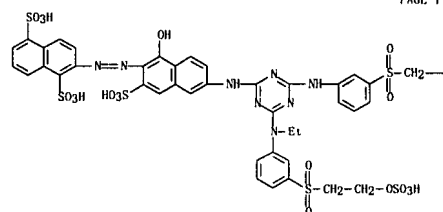
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 63211379	A	19880902	JP 1987-45957	19870227
PRIORITY APPL. INFO.:			JP 1987-45957	19870227
OTHER SOURCE(S):		MARPAT 110:116591		
GRAPHIC IMAGE:				

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

ABSTRACT:  
Cellulosic fibers are dyed by a single-bath method using reactive dyes I [D = residue of organic dye having SO<sub>3</sub>H groups; R1-3 = H, (substituted) lower alkyl; R1-2 = C<sub>6</sub>H<sub>4</sub> which may be substituted with 1-2 Me, Et, MeO, EtO, Cl, Br, NO<sub>2</sub>, CO<sub>2</sub>H, and/or SO<sub>3</sub>H groups, naphthylene which may be substituted with SO<sub>3</sub>H groups; Z1-2 = vinyl, CH<sub>2</sub>CH<sub>2</sub>; L = alkali-eliminating group; n = 1-3]. Thus, cotton fabric was immersed in a dye bath prepared from reactive dye II, Na<sub>2</sub>SO<sub>4</sub>, and Na<sub>2</sub>CO<sub>3</sub> at 50° , then washed, soaped, and dried to give greenish yellow fabric. Fallout of II in washing and soaping processes were 4% and 6%, resp.

IT 116818-02-1  
RL: USES (Uses)  
(for exhaust dyeing of cellulosic fibers)  
RN 116818-02-1 CAPLUS  
CN 1,5-Naphthalenedisulfonic acid, 2-[[6-[[4-[[ethyl]3-[[2-(sulfooxy)ethyl]sulfonyl]phenyl]amino]-6-[[3-[[2-(sulfooxy)ethyl]sulfonyl]phenyl]amino]-1,3,5-triazin-2-yl]amino]-1-hydroxy-3-sulfo-2-naphthalenyl]azo]- (9C1) (CA INDEX NAME)

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L4 ANSWER 37 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

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—CH<sub>2</sub>—OSO<sub>3</sub>H

L4 ANSWER 38 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1989:116590 CAPLUS  
 DOCUMENT NUMBER: 110:116590  
 TITLE: Continuous dyeing of cellulosic fibers with reactive dyes  
 INVENTOR(S): Nishinaka, Masatake; Harada, Naoki; Omura, Takashi; Imada, Kunihiko  
 PATENT ASSIGNEE(S): Sumitomo Chemical Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.  
 CODEN: JKKXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 63211378	A	19880902	JP 1987-44614	19870226
PRIORITY APPLN. INFO.:			JP 1987-44614	19870226
OTHER SOURCE(S):		MARPAT 110:116590		
GRAPHIC IMAGE:				

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

## ABSTRACT:

Cellulosic fibers are dyed continuously in dark shades with good fastness by using reactive dyes having free acid form I [D = residue of organic dye having SO<sub>3</sub>H groups; R<sup>1</sup>-3 = H, (substituted) lower alkyl; R<sup>1</sup>-2 = C<sub>6</sub>H<sub>4</sub> which may be substituted with I or 2 Me, Et, MeO, EtO, Cl, Br, NO<sub>2</sub>, CO<sub>2</sub>H, and/or SO<sub>3</sub>H groups, naphthylene which may be substituted with SO<sub>3</sub>H; Z<sup>1</sup>-2 = vinyl, CH<sub>2</sub>CH<sub>2</sub>IL; L = alkali-eliminable group; n = 1-3]. Thus, cotton broadcloth was passed continuously through a dye bath prepared from reactive dye II, Na<sub>2</sub>CO<sub>3</sub>, and Na alginate, then squeezed, dried, steamed 3 min at 100°, washed, soaped, and dried to give greenish yellow fabric with excellent fastness.

IT 116818-02-1

RL: USES (Uses)

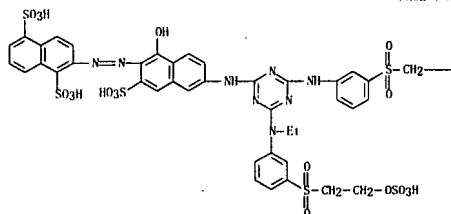
(for continuous dyeing of cellulosic fibers, with good fastness)

RN 116818-02-1 CAPLUS

CN 1,5-Naphthalenedisulfonic acid, 2-[[[6-[[4-[[ethyl[3-[[2-(sulfoxy)ethyl]sulfonyl]phenyl]amino]-6-[[3-[[2-(sulfoxy)ethyl]sulfonyl]phenyl]amino]-1,3,5-triazin-2-yl]amino]-1-hydroxy-3-sulfo-2-naphthalenyl]azo]- (9CI) (CA INDEX NAME)

L4 ANSWER 38 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

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—CH<sub>2</sub>—OSO<sub>3</sub>H

L4 ANSWER 39 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1989:116586 CAPLUS  
 DOCUMENT NUMBER: 110:116586  
 TITLE: Reactive dye compositions with improved solubility in water and aqueous alkalis  
 INVENTOR(S): Yamamoto, Yosuke; Harada, Naoki; Imada, Kunihiko; Omura, Takashi  
 PATENT ASSIGNEE(S): Sumitomo Chemical Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 15 pp.  
 CODEN: JKKXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 63213572	A	19880906	JP 1987-45965	19870227
PRIORITY APPLN. INFO.:			JP 1987-45965	19870227
OTHER SOURCE(S):		MARPAT 110:116586		
GRAPHIC IMAGE:				

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

## ABSTRACT:

The title compns. contain reactive dyes I [D = sulfo group-containing organic dye residue; R<sup>1</sup>, R<sup>2</sup>, R<sup>3</sup> = H, (un)substituted lower alkyl; R<sup>1</sup>, R<sup>2</sup> = (un)substituted phenylene, naphthylene; Z<sup>1</sup>, Z<sup>2</sup> = vinyl, CH<sub>2</sub>CH<sub>2</sub>IL; L = alkali-cleavable group; n = 1-3] and alkyl naphthylene sulfonic acid-HCHO condensate. A mixture of 11.65, methyl naphthalenesulfonic acid-HCHO condensate (degree of sulfonation 110%, average degree of condensation 1.5, Na salt) 34, and mineral oil emulsion 1 part was dissolved in hot water, cooled to 25°, treated with 15 volume parts 32.5% aqueous NaOH, 150 parts 50 Be water glass, and water to 1000 volume parts to give a padding solution showing good dyeing performance on cotton even after being stored 120 min at 25°.

IT 116818-02-1

RL: USES (Uses)

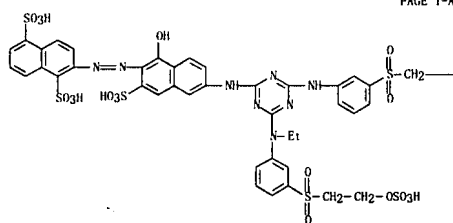
(dye, stabilizers for, alkyl naphthalenesulfonic acid-formaldehyde condensates as)

RN 116818-02-1 CAPLUS

CN 1,5-Naphthalenedisulfonic acid, 2-[[[6-[[4-[[ethyl[3-[[2-(sulfoxy)ethyl]sulfonyl]phenyl]amino]-6-[[3-[[2-(sulfoxy)ethyl]sulfonyl]phenyl]amino]-1,3,5-triazin-2-yl]amino]-1-hydroxy-3-sulfo-2-naphthalenyl]azo]- (9CI) (CA INDEX NAME)

L4 ANSWER 39 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

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-CH<sub>2</sub>-OSO<sub>3</sub>H

L4 ANSWER 40 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1989:77511 CAPLUS  
 DOCUMENT NUMBER: 110:77511  
 TITLE: Storage-stable reactive dye aqueous compositions  
 INVENTOR(S): Yamuchi, Noriaki; Imada, Kunihiko; Omura, Takashi  
 PATENT ASSIGNEE(S): Sumitomo Chemical Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.  
 CODEN: JXAXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:  

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 63210171	A	19880831	JP 1987-43737	19870225
PRIORITY APPL. INFO.:			JP 1987-43737	19870225
OTHER SOURCE(S):		MARPAT 110:77511		

 GRAPHIC IMAGE:

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

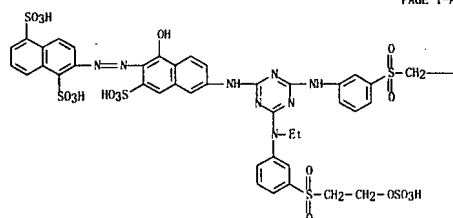
## ABSTRACT:

The title compns. with pH 3-7 contain 5-50% of 21 dye I [D = SO<sub>3</sub>H-containing organic dye residue; R1-3 = H, (un)substituted lower alkyl; (un)substituted phenylene, naphthylene; Z1-2 = vinyl, CH<sub>2</sub>CH<sub>2</sub>L; L = alkali-removable group; n = 1-3] and 0-5% buffers. Thus, 900 parts aqueous solution containing 16.7% dye I was mixed with 5 parts AcO<sub>2</sub>Na.3H<sub>2</sub>O, then diluted with water to 1000 parts to give dye composition with pH 5.1. The composition showed good stability after 4-wk storage at 0° or at 50°. When cotton was dyed with the dye composition, a yellow dyed product was obtained.

IT 116818-02-1  
 RL: MSC (Miscellaneous)  
 (dyes, aqueous compns., containing buffers, storage-stable)  
 RN 116818-02-1: CAPLUS  
 CN 1,5-Naphthalenedisulfonic acid, 2-[[6-[[4-ethyl[3-[[2-(sulfooxy)ethyl]sulfonyl]phenyl]amino]-6-[[3-[[2-(sulfooxy)ethyl]sulfonyl]phenyl]amino]-1,3,5-triazin-2-yl]amino]-1-hydroxy-3-sulfo-2-naphthalenyl]azo]- (9CI) (CA INDEX NAME)

L4 ANSWER 40 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

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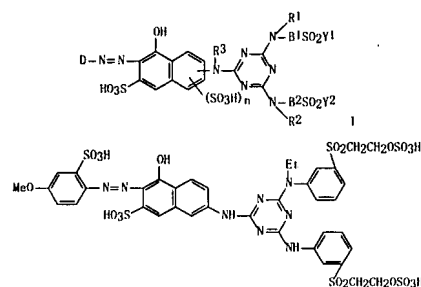
-CH<sub>2</sub>-OSO<sub>3</sub>H

L4 ANSWER 41 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1988:551440 CAPLUS  
 DOCUMENT NUMBER: 109:151440  
 TITLE: Scarlet monoazo dyes having two vinylsulfone-type fiber-reactive groups  
 INVENTOR(S): Yokogawa, Kazufumi; Morimitsu, Toshihiko; Harada, Naoki; Omura, Takashi; Kikkawa, Sadanobu  
 PATENT ASSIGNEE(S): Sumitomo Chemical Co., Ltd., Japan  
 SOURCE: Eur. Pat. Appl., 53 pp.  
 CODEN: EPAXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:  

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 264137	A1	19880420	EP 1987-115146	19871016
EP 264137	B1	19910612		
R: RE, CH, DE, ES, FR, GR, IT, LI, NL, SE				
JP 63101458	A	19880506	JP 1986-248201	19861017
JP 07053832	B	19950607		
JP 63145369	A	19880617	JP 1986-294514	19861209
JP 07091484	B	19951004		
US 4904766	A	19900227	US 1987-106798	19871013
PRIORITY APPL. INFO.:			JP 1986-248201	A 19861017
			JP 1986-294514	A 19861209
OTHER SOURCE(S):		MARPAT 109:151440		

 GRAPHIC IMAGE:



11

## ABSTRACT:

The title compds. I [B1, B2 = phenylene, naphthylene; D = methoxysulfonylphenyl, methoxydisulfonylphenyl, (un)substituted naphthyl; R1-R3 = H, (un)substituted alkyl; Y1, Y2 = CH=CH<sub>2</sub>, CH<sub>2</sub>CH<sub>2</sub>Z; Z = alkali-cleavable substituent], useful for dyeing or printing fiber materials fast scarlet shades, are prepared 6-Amino-1-hydroxy-3-naphthalenesulfonic acid was condensed with cyanuric

L4 ANSWER 41 OF 76 CAPLUS COPYRIGHT 2007 ACS ON STN (Continued)  
chloride, the condensate coupled with diazotized p-anisidine-*m*-sulfonic acid, and the azoazo intermediate sequentially condensed with *m*-EtNC<sub>6</sub>H<sub>4</sub>SO<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>SO<sub>3</sub>H and *m*-H<sub>2</sub>NC<sub>6</sub>H<sub>4</sub>SO<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>SO<sub>3</sub>H, forming II,  $\lambda_{\text{max}}$  (H<sub>2</sub>O) 500 nm.

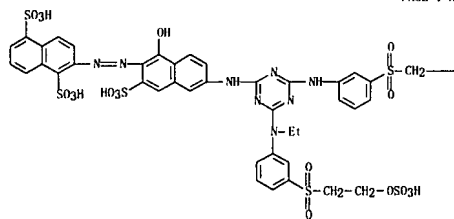
IT 116818-02-1P 116818-03-2P 116818-04-3P

RL: PREP (Preparation)

(manufacture of, as scarlet reactive dye)

RN 116818-02-1 CAPLUS

CN 1,5-Naphthalenedisulfonic acid, 2-[[6-[[4-[[ethyl[3-[[2-(sulfoxy)ethyl]sulfonyl]phenyl]amino]-6-[[3-[[2-(sulfoxy)ethyl]sulfonyl]phenyl]amino]-1,3,5-triazin-2-yl]amino]-1-hydroxy-3-sulfo-2-naphthalenyl]azo]- (9C1) (CA INDEX NAME)



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-CH<sub>2</sub>-OSO<sub>3</sub>H

RN 116818-03-2 CAPLUS

CN 1,7-Naphthalenedisulfonic acid, 2-[[4-[[ethyl[3-[[2-(sulfoxy)ethyl]sulfonyl]phenyl]amino]-6-[[3-[[2-(sulfoxy)ethyl]sulfonyl]phenyl]amino]-1,3,5-triazin-2-yl]amino]-5-hydroxy-6-[[1-sulfo-2-naphthalenyl]azo]- (9C1) (CA INDEX NAME)

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L4 ANSWER 42 OF 76 CAPLUS COPYRIGHT 2007 ACS ON STN

ACCESSION NUMBER: 1988:530801 CAPLUS

DOCUMENT NUMBER: 109:130801

TITLE: Reactive disazo dyes

INVENTOR(S): Schaefer, Ludwig; Springer, Hartmut; Haehnle, Reinhard

PATENT ASSIGNEE(S): Hoechst A.-G., Fed. Rep. Ger.

SOURCE: Ger. Offen., 20 pp.

COD/EN: GWXXBX

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 3636398	A1	19880505	DE 1986-3636398	19861025
EP 265828	A1	19880504	EP 1987-115414	19871021
EP 265828	B1	19900808		
R: BE, CH, DE, ES, FR, GB, IT, LI				
JP 63112661	A	19880517	JP 1987-266683	19871023
JP 07098910	B	19951025		
PRIORITY APPLN. INFO.: DE 1986-3636398 A 19861025				
OTHER SOURCE(S): MARPAT 109:130801				

GRAPHIC IMAGE:

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

#### ABSTRACT:

The title compds. I [A = (un)substituted phenylene, RICH<sub>3</sub>CG<sub>6</sub>H<sub>3</sub>R<sub>2</sub>; G = direct bond, CH-CH, NHCNH; R<sub>1</sub>, R<sub>2</sub> = H, SO<sub>3</sub>H, Me, Et, MeO, EtO; D = (un)substituted phenylene, (un)substituted naphthylene, C<sub>6</sub>H<sub>4</sub>NHCOC<sub>6</sub>H<sub>4</sub>; X = (un)substituted aminohydroxysulfonaphthalene residue, aniline residue (from coupling component); R = CO<sub>2</sub>H, CONH<sub>2</sub>; X = CH-CH<sub>2</sub>,  $\beta$ -sulfoethyl,  $\beta$ -chloroethyl], useful for dyeing carbonamide and/or hydroxyl group-containing materials, are prepared. II (R<sub>3</sub> = Cl) was dissolved in H<sub>2</sub>O, and condensed with nicotinic acid amide in the presence of NaOAc, forming III (R<sub>3</sub> = Q), which was isolated as the K salt,  $\lambda_{\text{max}}$  510 nm, which dyed cotton in a fast blue-red shade.

IT 116390-66-0P

RL: PREP (Preparation)

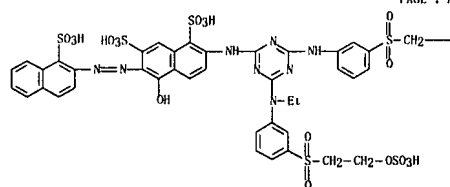
(manufacture of, as reactive orange dye)

RN 116390-66-0 CAPLUS

CN Pyridinium, 1,1'-[[1,4-phenylenebis[imino[6-[[5-hydroxy-7-sulfo-6-[[1-sulfo-6-[[2-(sulfoxy)ethyl]sulfonyl]-2-naphthalenyl]azo]-2-naphthalenyl]amino]-1,3,5-triazine-4,2-diyl]]]bis[3-carboxy-, bis(inner salt) (9C1) (CA INDEX NAME)

L4 ANSWER 41 OF 76 CAPLUS COPYRIGHT 2007 ACS ON STN (Continued)

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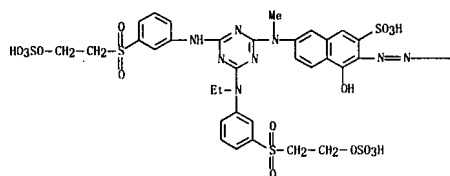
PAGE 1-B

-CH<sub>2</sub>-OSO<sub>3</sub>H

RN 116818-04-3 CAPLUS

CN 1-Naphthalenesulfonic acid, 2-[[6-[[4-[[ethyl[3-[[2-(sulfoxy)ethyl]sulfonyl]phenyl]amino]-6-[[3-[[2-(sulfoxy)ethyl]sulfonyl]phenyl]amino]-1,3,5-triazin-2-yl]methylamino]-1-hydroxy-3-sulfo-2-naphthalenyl]azo]- (9C1) (CA INDEX NAME)

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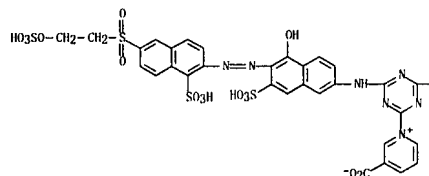


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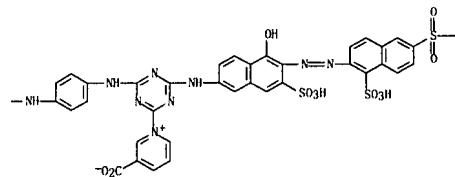


L4 ANSWER 42 OF 76 CAPLUS COPYRIGHT 2007 ACS ON STN (Continued)

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-CH<sub>2</sub>-CH<sub>2</sub>-OSO<sub>3</sub>H

IT 116413-96-8P

RL: PREP (Preparation)

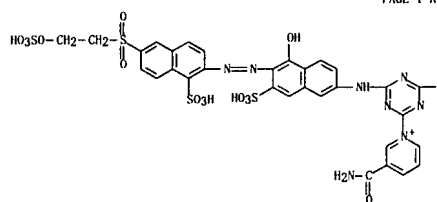
(manufacture of, as red reactive dye)

RN 116413-96-8 CAPLUS

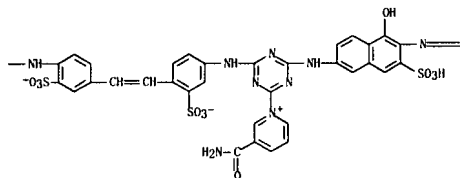
CN Pyridinium, 1,1'-[[1,2-ethenediylbis[(3-sulfo-4,1-phenylene)imino[6-[[5-hydroxy-7-sulfo-6-[[1-sulfo-6-[[2-(sulfoxy)ethyl]sulfonyl]-2-naphthalenyl]azo]-2-naphthalenyl]amino]-1,3,5-triazine-4,2-diyl]]]bis[3-(aminocarbonyl)-, bis(inner salt) (9C1) (CA INDEX NAME)

L4 ANSWER 42 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

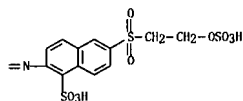
PAGE 1-A



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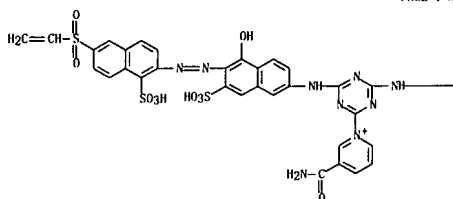


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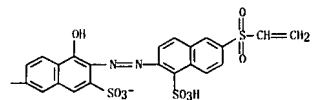


L4 ANSWER 43 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

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IT 114876-45-8P 114876-51-6P 114904-11-9P

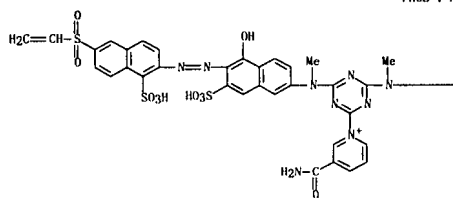
RL: PREP (Preparation)

(manufacture of, as reactive disazo dye)

RN 114876-45-8 CAPLUS

CN Pyridinium, 3-(aminocarbonyl)-1-[4,6-bis[[6-(ethenylsulfonyl)-1-sulfo-2-naphthalenyl]azo]-5-hydroxy-7-sulfo-2-naphthalenyl]amino]-1,3,5-triazin-2-yl]-, inner salt (9C1) (CA INDEX NAME)

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L4 ANSWER 43 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1988:408029 CAPLUS

DOCUMENT NUMBER: 109:8029

TITLE: Water-soluble reactive pyridinium group-containing

disazo dye manufacture

INVENTOR(S): Schlaefer, Ludwig; Springer, Hartmut; Haehle, Reinhard

PATENT ASSIGNEE(S): Hoechst A.-G., Fed. Rep. Ger.

SOURCE: Ger. Offen., 35 pp.

CODEN: GWXXRX

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 3629574	A1	19880303	DE 1986-3629574	19860830
EP 258806	A1	19880309	EP 1987-112385	19870826
EP 258806	B1	19901227		
R: RE, CH, DE, FR, GB, IT, LI				
JP 63068669	A	19880328	JP 1987-211517	19870827
JP 07098909	B	19951025		
US 4806127	A	19890221	US 1987-90222	19870827
PRIORITY APPL. INFO:			DE 1986-3629574	A 19860830
OTHER SOURCE(S):			MARPAT 109:8029	
GRAPHIC IMAGE:				

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

## ABSTRACT:

The title compds. I [D1, D2 = (un)substituted benzene ring, (un)substituted naphthalene ring, R1C6H3NHC6H3R2, C6H4NHC6H4, C6H4CONHC6H3SO3N; R1, R2 = H, NO2, SO3H, Me, Et, MeO, EtO; K1, R2 = divalent (un)substituted aminohydroxynaphthalenesulfonic acid (or alkali salt) moiety; R = CO2H, CONH2; X = CH2CH2, CH2CH2SO3H, CH2CH2Cl] and their 1:1 copper complexes, useful for dyeing and printing of cellulose fibers and cellulose fiber blends, are prepared. Thus, 3-(p-sulfatoethylsulfonyl)aniline was diazotized and 2 molar equivs. were coupled with 2-amino-8-hydroxy-6-naphthalenesulfonic acid-cyanuric chloride 2:1 condensate, and the moist disazo condensate was condensed with nicotinamide to give II, having  $\lambda_{max}$  (H2O) 478 nm, which dyed cotton in a fast orange-red shade.

IT 114876-33-4P

RL: PREP (Preparation)

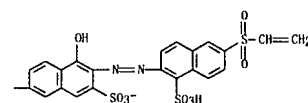
(manufacture of, as orange reactive disazo dye)

RN 114876-33-4 CAPLUS

CN Pyridinium, 3-(aminocarbonyl)-1-[4,6-bis[[6-(ethenylsulfonyl)-1-sulfo-2-naphthalenyl]azo]-5-hydroxy-7-sulfo-2-naphthalenyl]amino]-1,3,5-triazin-2-yl]-, inner salt (9C1) (CA INDEX NAME)

L4 ANSWER 43 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

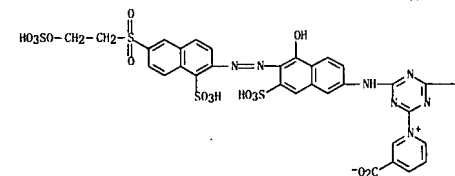
PAGE 1-B



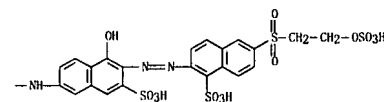
RN 114876-51-6 CAPLUS

CN Pyridinium, 1-[4,6-bis[[5-hydroxy-7-sulfo-6-[[1-sulfo-6-[[2-(sulfoxyethyl)sulfonyl]-2-naphthalenyl]azo]-2-naphthalenyl]amino]-1,3,5-triazin-2-yl]-3-carboxy]-, inner salt (9C1) (CA INDEX NAME)

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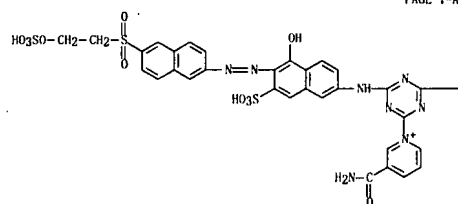


RN 114904-11-9 CAPLUS

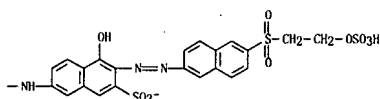
CN Pyridinium, 3-(aminocarbonyl)-1-[4,6-bis[[5-hydroxy-7-sulfo-6-[[2-(sulfoxyethyl)sulfonyl]-2-naphthalenyl]azo]-2-naphthalenyl]amino]-1,3,5-triazin-2-yl]-, inner salt (9C1) (CA INDEX NAME)

L4 ANSWER 43 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

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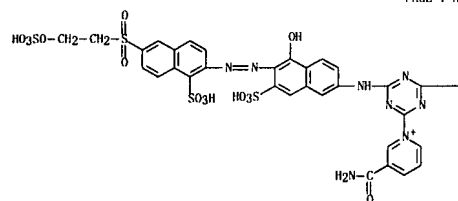


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IT 114876-32-3P  
 RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation and hydrolysis of)  
 RN 114876-32-3 CAPLUS  
 CN Pyridinium, 3-(aminocarbonyl)-1-[4,6-bis[[5-hydroxy-7-sulfo-6-[[1-sulfo-6-[[2-(sulfoxy)ethyl]sulfonyl]-2-naphthalenyl]azo]-2-naphthalenyl]amino]-1,3,5-triazin-2-yl]-, inner salt (9C1) (CA INDEX NAME)

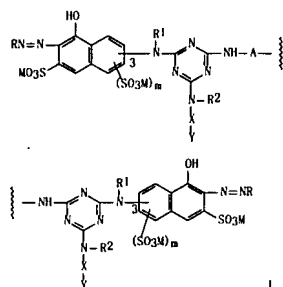
PAGE 1-A



L4 ANSWER 44 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN  
 ACCESSION NUMBER: 1988:114198 CAPLUS  
 DOCUMENT NUMBER: 108:114198  
 TITLE: Reactive disazo dyes  
 INVENTOR(S): Hibara, Toshio  
 PATENT ASSIGNEE(S): Mitsubishi Chemical Industries Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.  
 CODEN: JXXXXF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 62132968	A	19870616	JP 1985-273344	19851206
JP 06019046	B	19940316	JP 1985-273344	19851206

PRIORITY APPLN. INFO.:  
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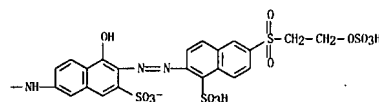


ABSTRACT:  
 The title dyes, useful for cellulosic and N-containing fibers and for the one-bath-one-step dyeing of polyester blends, having the free-acid form I [A = aliphatic or aromatic divalent group; M = H, alkali metal; R = benzene or naphthalene diazo component residue; R1 = H, lower alkyl; R2 = H, (un)substituted lower alkyl; X = (un)substituted phenylene, naphthylene; Y = SO2CH2CH2, SO2C2H4W; W = alkali-removable group; m = 0, 1], are prepared. Thus, 6-(4,6-dichloro-s-triazin-2-ylamino)-2-(2-sulfo-phenylazo)-1-naphthol-3-sulfonic acid was condensed with p-phenylenediamine and then with m-MeNC6H4SO2CH2CH2SO3H, and salted out with KCl to give I (3,3'-bonding, R = 2-C6H4SO3H, R1 = H, R2 = Me, X = 3-C6H4, Y = SO2CH2CH2SO3H, m = 0, K salt), deep orange on cotton.

IT 113276-07-6P 113276-08-7P 113276-09-8P  
 RL: PREP (Preparation)  
 (manufacture of, as reactive dye for one-bath-one-step dyeing of polyester fiber blends)  
 RN 113276-07-6 CAPLUS  
 CN Benzoic acid, 3,5-bis[[4-[[[5-hydroxy-7-sulfo-6-[[1-sulfo-2-naphthalenyl]azo]-2-naphthalenyl]amino]-6-[[2-sulfo-5-[[2-

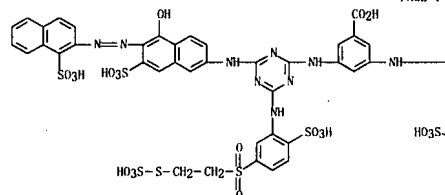
L4 ANSWER 43 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 1-B

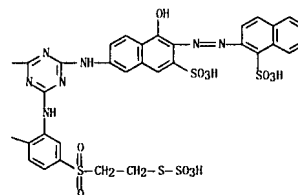


L4 ANSWER 44 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)  
 (sulfothio)ethyl]sulfonyl]phenyl]amino]-1,3,5-triazin-2-yl]amino]- (9C1)  
 (CA INDEX NAME)

PAGE 1-A



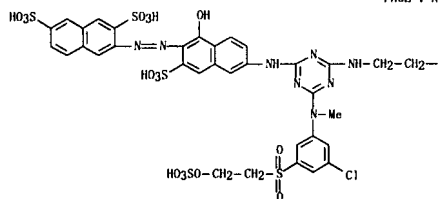
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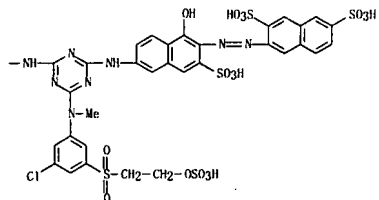
RN 113276-08-7 CAPLUS  
 CN 2,7-Naphthalenedisulfonic acid, 3,3'-[1,2-ethanediy]bis[imino[6-[[3-chloro-5-[[2-(sulfoxy)ethyl]sulfonyl]phenyl]methylamino]-1,3,5-triazine-4,2-diyl]imino(1-hydroxy-3-sulfo-6,2-naphthalenediyl)azo]]bis- (9C1) (CA INDEX NAME)

L4 ANSWER 44 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

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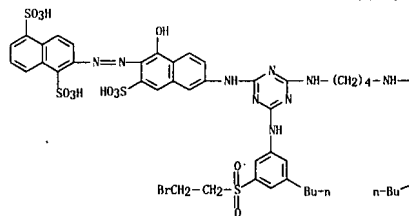
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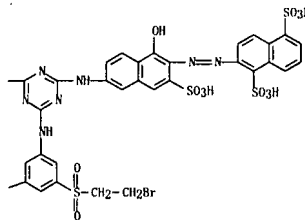
RN 113276-09-8 CAPLUS  
CN 1,5-Naphthalenedisulfonic acid, 2,2'-[1,4-butanediylbis[imino[6-[[3-[(2-bromoethyl)sulfonyl]-5-butylphenyl]amino]-1,3,5-triazine-2,4-diyl]bis[imino[1-hydroxy-3-sulfo-6,2-naphthalenediyl]azo]]bis- (9C1) (CA INDEX NAME)

L4 ANSWER 44 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

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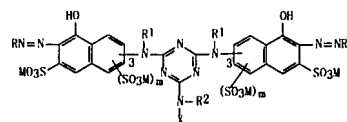
PAGE 1-B



L4 ANSWER 45 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1988:114197 CAPLUS  
DOCUMENT NUMBER: 108:114197  
TITLE: Reactive disazo dyes  
INVENTOR(S): Hibara, Toshio  
PATENT ASSIGNEE(S): Mitsubishi Chemical Industries Co., Ltd., Japan  
SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.  
CODEN: JXXXXF  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 62132967	A	19870616	JP 1985-273343	19851206
JP 06019045	B	19940316		
PRIORITY APPL. INFO.:			JP 1985-273343	19851206
OTHER SOURCE(S):		CASREACT 108:114197		
GRAPHIC IMAGE:				



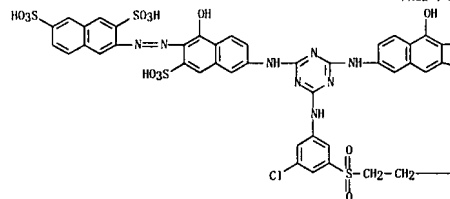
ABSTRACT:  
The title dyes, which can be used for cellulose and N-containing fibers in the one-bath-one-step dyeing of polyester blends, and which have the free-acid form I [M = H, alkali metal; R = benzene or naphthalene diazo residue; R1 = H, lower alkyl; R2 = H, (un)substituted lower alkyl; X = (un)substituted phenylene, (un)substituted naphthylene; m = 0, 1], are prepared. Thus, 6-(4,6-dichloro-2-triazin-2-ylamino)-2-(2-sulfonylphenylazo)-1-naphthol-3-sulfonic acid was condensed with 6-amino-2-(2-sulfonylphenylazo)-1-naphthol-3-sulfonic acid and then with m-MeNC6H4SO2CH2CH2OS03H, and salted out with KCl to give I (3,3'-bonding, M = K, R = 2-C6H4SO3H, R1 = H, R2 = Me, X = 3-C6H4SO2CH2CH2OS03H, m = 0), deep orange on cotton.

IT 113276-53-2P 113276-54-3P 113303-76-7P  
RL: PREP (Preparation)  
(manufacture of, as reactive dye for one-bath-one-step-dyeing of polyester fiber blends)

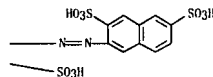
RN 113276-53-2 CAPLUS  
CN 2,7-Naphthalenedisulfonic acid, 3,3'-[1,6-[[3-chloro-5-[[2-(sulfoxy)ethyl]sulfonyl]phenyl]amino]-1,3,5-triazine-2,4-diyl]bis[imino[1-hydroxy-3-sulfo-6,2-naphthalenediyl]azo]]bis- (9C1) (CA INDEX NAME)

L4 ANSWER 45 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 1-A



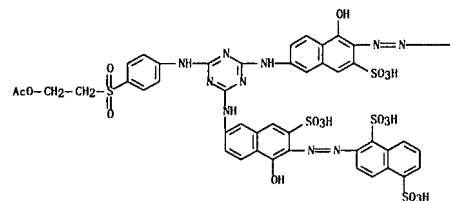
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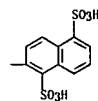
-OS03H

RN 113276-54-3 CAPLUS  
CN 1,5-Naphthalenedisulfonic acid, 2,2'-[1,4-[[[2-(acetoxy)ethyl]sulfonyl]phenyl]amino]-1,3,5-triazine-2,4-diyl]bis[imino[1-hydroxy-3-sulfo-6,2-naphthalenediyl]azo]]bis- (9C1) (CA INDEX NAME)

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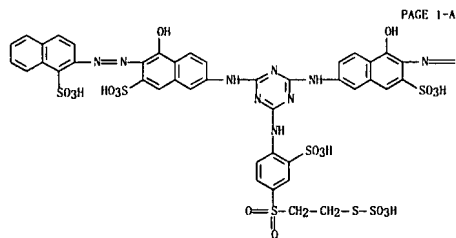


L4 ANSWER 45 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

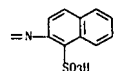


PAGE 1-B

RN 113303-76-7 CAPLUS  
 CN 1-Naphthalenesulfonic acid, 2,2'-[6-[[2-sulfo-4-[[2-(sulfothio)ethyl]sulfonyl]phenyl]amino]-1,3,5-triazine-2,4-diyl]bis[imino(1-hydroxy-3-sulfo-6,2-naphthalenediyl)azo]]bis- (9C1) (CA INDEX NAME)



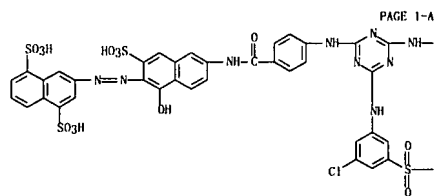
PAGE 1-A



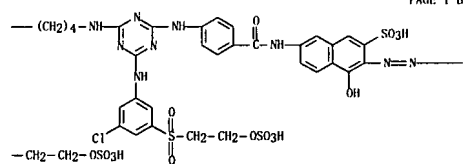
PAGE 1-B

L4 ANSWER 46 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

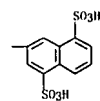
RN 110111-50-7 CAPLUS  
 CN 1,5-Naphthalenedisulfonic acid, 3,3'-[1,4-butanediylbis[imino[6-[[3-chloro-5-[[2-(sulfoxy)ethyl]sulfonyl]phenyl]amino]-1,3,5-triazine-4,2-diyl]imino-4,1-phenylenecarbonylimino(1-hydroxy-3-sulfo-6,2-naphthalenediyl)azo]]bis- (9C1) (CA INDEX NAME)



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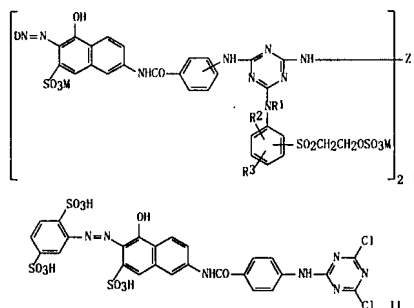
PAGE 1-C

RN 110111-51-8 CAPLUS  
 CN 1,5-Naphthalenedisulfonic acid, 3,3'-[1,4-cyclohexanediylbis[imino[6-[methyl[4-[[2-(sulfoxy)ethyl]sulfonyl]phenyl]amino]-1,3,5-triazine-4,2-diyl]imino-4,1-phenylenecarbonylimino(1-hydroxy-3-sulfo-6,2-naphthalenediyl)azo]]bis- (9C1) (CA INDEX NAME)

L4 ANSWER 46 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1988:77120 CAPLUS  
 DOCUMENT NUMBER: 108:77120  
 TITLE: Reactive diazo dyes  
 INVENTOR(S): Hibara, Toshio  
 PATENT ASSIGNEE(S): Mitsubishi Chemical Industries Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.  
 CUBEN: JNXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 62030158	A	19870209	JP 1985-167402	19850731
PRIORITY APPL. INFO.:			JP 1985-167402	19850731
GRAPHIC IMAGE:				

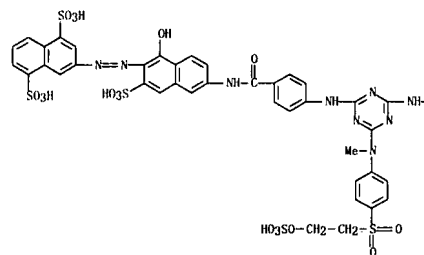


ABSTRACT:  
 The title dyes I [M = H, alkali metal; D = benzene- or naphthalene-based diazo component residue; R1 = H, alkyl; R2, R3 = H, alkyl, alkoxy, halogen, SO3M; Z = divalent aromatic or aliphatic residue], useful for dyeing cotton under similar conditions for dyeing polyester fibers, were prepared and used for dyeing cotton in orange to pink shades. Thus, I1 was condensed with p-phenylenediamine and then with 3-(sulfoethylsulfonyl)aniline to give I (R1 = R2 = R3 = M = H; D = 2,5-disulfonylphenyl; 3-SO2CH2CH2OS03M; Z = p-phenylene), orange on cotton.

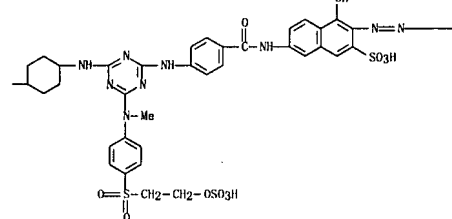
17 110111-50-7 110111-51-8 110111-55-2  
 110111-58-5 110111-59-6  
 RL: TEM (Technical or engineered material use): USES (Uses)  
 (dye, for cotton)

L4 ANSWER 46 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

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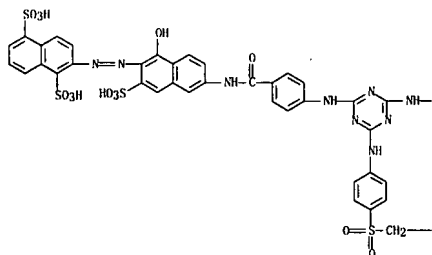
PAGE 1-C



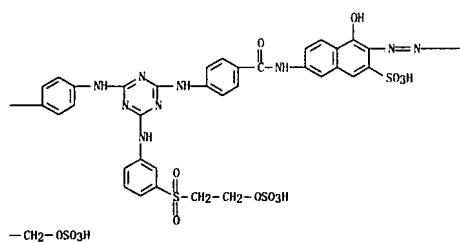
RN 110111-55-2 CAPLUS

L4 ANSWER 46 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)  
 CN 1,5-Naphthalenedisulfonic acid, 2,2'-[1,4-phenylenebis[imino[6-[[3-[[2-(sulfoxyethyl)sulfonyl]phenyl]amino]-1,3,5-triazine-4,2-diyl]imino-4,1-phenylene]carbonylimino(1-hydroxy-3-sulfo-6,2-naphthalenediyl)azo]]bis- (9C1) (CA INDEX NAME)

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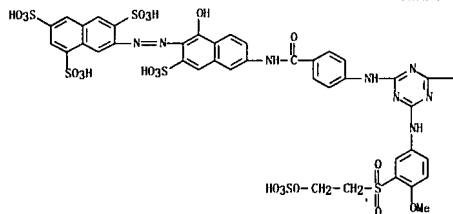
L4 ANSWER 46 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 1-C

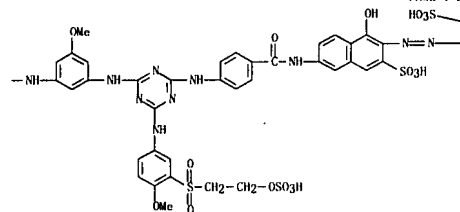


RN 110111-59-6 CAPLUS  
 CN 1,3,6-Naphthalenetrisulfonic acid, 7,7'-[5-methoxy-1,3-phenylene]bis[imino[6-[[4-methoxy-3-[[2-(sulfoxyethyl)sulfonyl]phenyl]amino]-1,3,5-triazine-4,2-diyl]imino-4,1-phenylene]carbonylimino(1-hydroxy-3-sulfo-6,2-naphthalenediyl)azo]]bis- (9C1) (CA INDEX NAME)

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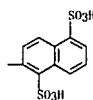


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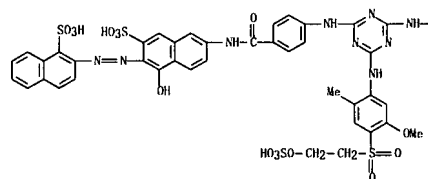
L4 ANSWER 46 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

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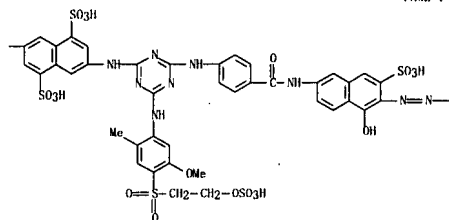


RN 110111-58-5 CAPLUS  
 CN 1,5-Naphthalenedisulfonic acid, 3,7-bis[[4-[[[5-hydroxy-7-sulfo-6-[[1-sulfo-2-naphthalenyl]azo]-2-naphthalenyl]amino]carbonyl]phenyl]amino]-6-[[5-methoxy-2-methyl-4-[[2-(sulfoxyethyl)sulfonyl]phenyl]amino]-1,3,5-triazin-2-yl]imino]- (9C1) (CA INDEX NAME)

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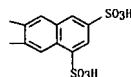


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L4 ANSWER 46 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

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L4 ANSWER 47 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1987:592839 CAPLUS  
DOCUMENT NUMBER: 107:192839  
TITLE: Triazo compounds  
INVENTOR(S): Hibara, Toshio  
PATENT ASSIGNEE(S): Mitsubishi Chemical Industries Co., Ltd., Japan  
SOURCE: Jpn. Kokai Tokkyo Koho, 11 pp.  
CODEN: JKXXAF  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 62081456	A	19870414	JP 1985-220912	19851003
JP 06055904	B	19940727		

PRIORITY APPLN. INFO.: JP 1985-220912 19851003  
OTHER SOURCE(S): CASREACT 107:192839  
GRAPHIC IMAGE:

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

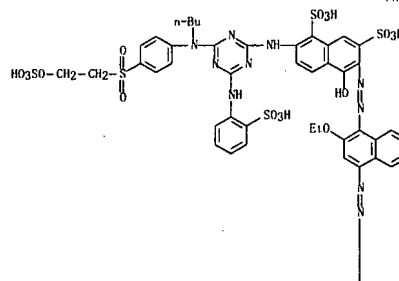
#### ABSTRACT:

The title compds. I [M = H, alkali metal; R = H, carboxy; R1 = H, lower alkyl, alkoxy, carboxy, sulfo; R2, R4 = H, lower alkyl, alkoxy, AcNH, sulfo; R3 = lower alkyl, alkoxy, sulfo; R5, R6 = H, lower alkyl; Y = SO2CH2CH2, SO2CH2CH2W; W = alkali-removable group; X = (un)substituted phenylene, naphthylene; Z = Cl, F, Br, amine residue, MeO, PhO; m = 1-3; n = 0, 1; the A, B, and C rings may be benzene or naphthalene rings] were prepared and used for dyeing cellulosic and N-containing fibers. Thus, 2-naphthylamine-3,6,8-trisulfonic acid was diazotized, coupled with 2-methoxy-5-methylaniline, diazotized, coupled with 2-methoxy-5-methyl-aniline, diazotized, and coupled with the condensation product of cyanuric chloride with 1-amino-8-hydroxynaphthalene-3,6-disulfonic acid and m-MeNH<sub>2</sub>CH<sub>2</sub>SO<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>SO<sub>3</sub>H to give II, greenish pink on cotton.

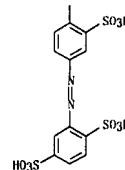
IT 110581-08-3  
RL: B10L (Biological study)  
(dye, for cotton, manufacture of)  
RN 110581-08-3 CAPLUS  
CN 1,7-Naphthalenedisulfonic acid, 2-[[4-[[butyl[4-[[2-(sulfoxyethyl)sulfonyl]phenyl]amino]-6-[[2-(sulfoxyethyl)amino]-1,3,5-triazin-2-yl]amino]-6-[[4-[[4-[[2,5-disulfo(phenyl)azo]-2-sulfo(phenyl)azo]-2-ethoxy-1-naphthalenyl]azo]-5-hydroxy- (9C1) (CA INDEX NAME)

L4 ANSWER 47 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

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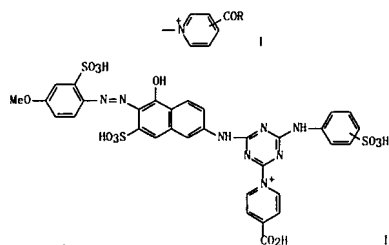
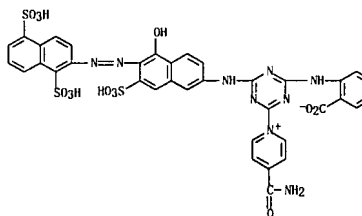
L4 ANSWER 48 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1987:578029 CAPLUS  
DOCUMENT NUMBER: 107:178029  
TITLE: Dyeing nitrogen-containing fibers  
INVENTOR(S): Izutsu, Kyoto; Watanabe, Shigeyuki; Shirasaki, Toshitaka  
PATENT ASSIGNEE(S): Nippon Kayaku Co., Ltd., Japan  
SOURCE: Jpn. Kokai Tokkyo Koho, 12 pp.  
CODEN: JKXXAF  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 62053486	A	19870309	JP 1985-188517	19850829

PRIORITY APPLN. INFO.: JP 1985-188517 19850829  
GRAPHIC IMAGE:

L4 ANSWER 48 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



#### ABSTRACT:

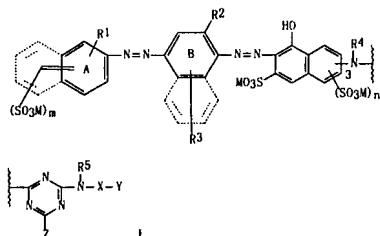
Wool, silk, and acrylic-wool blends were dyed with dyes containing 21 s-triazine group containing 1 group (W = OH, amino) at pH 4-9 at 80-120°. Thus, cyanuric chloride was condensed with a mixture of 3- and 4-aminobenzenesulfonic acids and 7-amino-4-hydroxy-3-(4-methoxy-2-sulfo(phenyl)azo)naphthalene-2-sulfonic acid and treated with isonicotinic acid at 90° for 8 h to give II as a 1:1 mixture of 3- and 4-SO3H isomers. With this dye wool gave a fast pink dyeing showing no dye fall off in 50% DMF at 100° for 1 h.

IT 110136-77-1  
RL: USES (Uses)  
(dye, for nitrogen-containing fibers)  
RN 110136-77-1 CAPLUS  
CN Pyridinium, 4-(aminocarbonyl)-1-[4-[(2-carboxyphenyl)amino]-6-[[6-[[1,5-disulfo-2-naphthalenyl]azo]-5-hydroxy-7-sulfo-2-naphthalenyl]amino]-1,3,5-triazin-2-yl]]-, inner salt (9C1) (CA INDEX NAME)

L4 ANSWER 49 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1987:516954 CAPLUS  
 DOCUMENT NUMBER: 107:116954  
 TITLE: Reactive diazo dyes  
 INVENTOR(S): Hibara, Toshio; Sanada, Yukiyo  
 PATENT ASSIGNEE(S): Mitsubishi Chemical Industries Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.  
 CODEN: JXXXXF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 62084160	A	19870417	JP 1985-225555	19851009
JP 06089264	B	19941109		
PRIORITY APPLN. INFO.:			JP 1985-225555	19851009
OTHER SOURCE(S):		CASREACT 107:116954		
GRAPHIC IMAGE:				

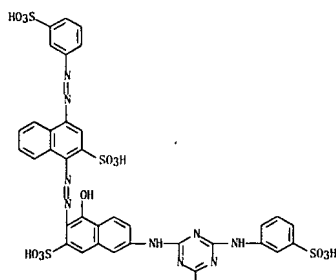


ABSTRACT:  
 Diazo compds. I (M = H, alkali metal; R1 = H, Cl, lower alkyl, alkoxy, NO2, carboxy; R2 = lower alkyl, alkoxy, sulfo; R3 = H, lower alkyl, alkoxy, ureido, AcNH, sulfo; R4 = H, lower alkyl; R5 = M, (un)substituted lower alkyl; Y = SO2CH2CH2, SO2CH2CH2W; W = alkali-removable group; X = (un)substituted phenylene, naphthylene; Z = Cl, F, Br, amine residue, MeO, PhO; m = 1-3; n = 0, 1; rings A and B may be benzene or naphthalene ring) were prepared and used for dyeing cotton and wool. Thus, 2-naphthylamine-4,8-disulfonic acid + 2-aminobenzenesulfonic acid was diazotized, coupled with 1:1:1 condensate of 2-amino-5-hydroxynaphthalene-7-sulfonic acid, cyanuric chloride, and m-MeNC6H4SO2CH2CH2SO3M, and salted (KCl) to give I (A = 4,8-disulfo-2-naphthyl; B = benzene; R1 = R3 = R4 = H; R2 = sulfo; R5 = Me; XY = C6H4SO2CH2CH2SO3H-m; Z = Cl; n = 0; 3-bonding; K salt), deep red on cotton and wool.

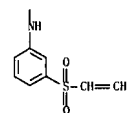
IT 110067-47-5

L4 ANSWER 49 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RL: TEM (Technical or engineered material use); USES (Uses)  
 (dye, for cotton)  
 RN 110067-47-5 CAPLUS  
 CN 2-Naphthalenesulfonic acid, 7-[[4-[[3-(ethenylsulfonyl)phenyl]amino]-6-[[3-sulphophenyl]amino]-1,3,5-triazin-2-yl]amino]-4-hydroxy-3-[[2-sulfo-4-[[3-sulphophenyl]azo]-1-naphthalenyl]azo]- (9C1) (CA INDEX NAME)



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L4 ANSWER 50 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1987:498201 CAPLUS  
 DOCUMENT NUMBER: 107:98201  
 TITLE: Water-soluble dyes  
 INVENTOR(S): Baxter, Anthony Gerard William; Bostock, Stephen  
 PATENT ASSIGNEE(S): Imperial Chemical Industries PLC, UK  
 SOURCE: Eur. Pat. Appl., 28 pp.  
 CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 219232	A2	19870422	EP 1986-307167	19860917
EP 219232	A3	19880504		
EP 219232	B1	19900829		
R: CH, DE, FR, GB, IT, LI				
US 4758658	A	19880719	US 1986-909848	19860922
JP 62086056	A	19870420	JP 1986-236373	19861006
JP 07064991	B	19950712		
US 4772323	A	19880920	US 1987-67262	19870629
PRIORITY APPLN. INFO.:			GB 1985-24697	A 19851007
GRAPHIC IMAGE:			US 1986-909848	A3 19860922

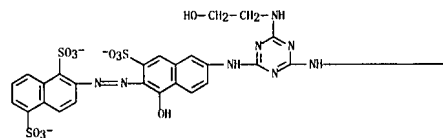
\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

ABSTRACT:  
 The title compds. I [M = H, NH4, monovalent metal; R1 = (C6H2a0)m(C6H2b0)nH and a, b = 1-8, where a = b; R2 = H, (C6H2a0)m(C6H2b0)nH; R5, R6, R8 = H, SO3M; R7 = H, halogen, Cl-4 alkyl, Cl-4 alkoxy, SO3M, CO2M; X = NR1R2, NR3R4; R3, R4 = H, alkyl, aryl, mono- or disazo chromophore; m = 1-10; n = 0-9], useful in jet-printing inks containing polyhydric alc. solvents, are prepared 5-hydroxy-6-(2-sulphophenylazo)-7-sulfonaphth-2-ylamine was condensed with cyanuric chloride, the condensate was condensed with II (M = undefined, R5 = SO3Na, R6-R8 = H), and H2NCH2CH2OH was condensed with the intermediate; salting out with brine gave I (R1 = HO(CH2)2, R2 = R6 = R7 = R8 = H, R5 = SO3Na, X = 5-hydroxy-6-(2-sulphophenylazo)-7-sulfonaphth-2-ylamino, M = Na) (I11). A jet-printing ink was prepared from I11 5, diethylene glycol 3S, and H2O 60 parts.

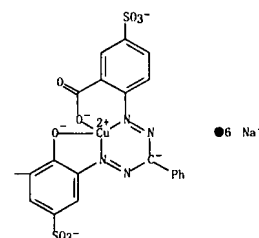
IT 109834-41-5P 109834-42-6P  
 RL: PREP (Preparation)  
 (manufacture of, as water-soluble dye for jet-printing inks)  
 RN 109834-41-5 CAPLUS  
 CN Cuprate(6-), [2-[[[3-[[4-[[6-[[1,5-disulfo-2-naphthalenyl]azo]-5-hydroxy-7-sulfo-2-naphthalenyl]amino]-6-[[2-hydroxyethyl]amino]-1,3,5-triazin-2-yl]amino]-2-hydroxy-5-sulphophenyl]azo]phenylmethyl]azo]-5-sulfobenzoate(8-)]-, hexasodium (9C1) (CA INDEX NAME)

L4 ANSWER 50 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

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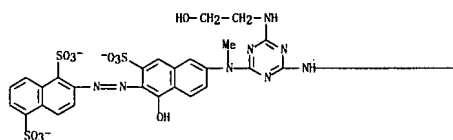
PAGE 1-B



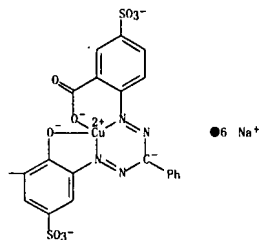
RN 109834-42-6 CAPLUS  
 CN Cuprate(6-), [2-[[[3-[[4-[[6-[[1,5-disulfo-2-naphthalenyl]azo]-5-hydroxy-7-sulfo-2-naphthalenyl]methylamino]-6-[[2-hydroxyethyl]amino]-1,3,5-triazin-2-yl]amino]-2-hydroxy-5-sulphophenyl]azo]phenylmethyl]azo]-5-sulfobenzoate(8-)]-, hexasodium (9C1) (CA INDEX NAME)

L4 ANSWER 50 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

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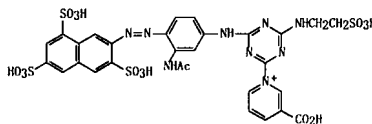


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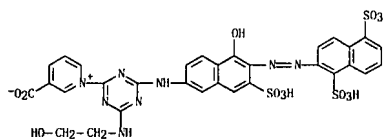
L4 ANSWER 51 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN  
 ACCESSION NUMBER: 1987:479474 CAPLUS  
 DOCUMENT NUMBER: 107:79474  
 TITLE: One-bath dyeing of fiber blends  
 INVENTOR(S): Izutsu, Kiyoto; Shirasaki, Toshitaka  
 PATENT ASSIGNEE(S): Nippon Kayaku Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 18 pp.  
 CODEN: JXXXXF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 62006989	A	19870113	JP 1985-140199	19850628
PRIORITY APPL. INFO.:			JP 1985-140199	19850628
GRAPHIC IMAGE:				



ABSTRACT:  
 Reactive dyes containing a ZCOR group (Z = pyridinio moiety; R = OH, NH2) and a s-triazinyl group were prepared and used for dyeing fiber blends from cotton, rayon, and jute. Thus, 4-(3,6,8-trisulfo-2-naphthylazo)-3-acetamidoaniline in water was condensed with cyanuric chloride, 2-sulfoethanamine, and then nicotinic acid to give 1, level reddish yellow on cotton-rayon blend.

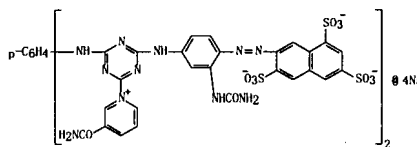
IT 109295-93-4  
 RL: USES (Uses)  
 (dye, for cellulosic fiber blends)  
 RN 109295-93-4 CAPLUS  
 CN Pyridinium, 3-carboxy-1-[4-[[6-[(1,5-disulfo-2-naphthalenyl)azo]-5-hydroxy-7-sulfo-2-naphthalenyl]amino]-6-[(2-hydroxyethyl)amino]-1,3,5-triazin-2-yl]-, inner salt (9CI) (CA INDEX NAME)



L4 ANSWER 51 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

L4 ANSWER 52 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN  
 ACCESSION NUMBER: 1987:86177 CAPLUS  
 DOCUMENT NUMBER: 106:86177  
 TITLE: Dyeing and printing cellulosic fibers  
 INVENTOR(S): Meininger, Fritz; Mischke, Peter; Koenig, Gerd  
 PATENT ASSIGNEE(S): Hoechst A.-G., Fed. Rep. Ger.  
 SOURCE: Ger. Offen., 40 pp.  
 CODEN: GWXXBX  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 3512630	A1	19861023	DE 1985-3512630	19850406
IN 165369	A1	19890930	IN 1986-CA254	19860331
EP 202436	A2	19861126	EP 1986-104441	19860401
EP 202436	A3	19890201		
US 4693726	A	19870915	US 1986-847722	19860403
JP 61231281	A	19861015	JP 1986-76811	19860404
PRIORITY APPL. INFO.:			DE 1985-3512630	A 19850406
OTHER SOURCE(S):				
GRAPHIC IMAGE:				

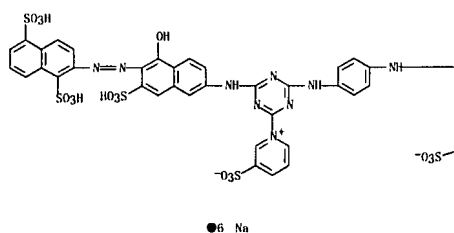


ABSTRACT:  
 Cellulosic fibers or their blends can be dyed advantageously with H2O-soluble reactive dyes bearing s-triazinylpyridinium groups substituted in the pyridine ring with HO, HOCH2, alkoxy, CHO, carbamoyl, CN, carboxy, SO3H, or halogen groups. Dyeing 50 parts cotton fabric in a bath containing the reactive dye 1 2, Na2SO4 50, m-O2NCGH4SO3Na 1, and H2O 900 parts at 40° for 45 min, adding 100 parts solution of calcined soda, and heating 45 min at 60° gave a strong, yellow-gold dyeing with good fastness.

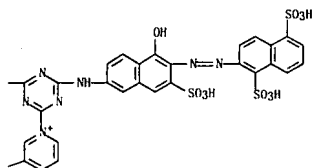
IT 106620-94-4 106620-97-7  
 RL: USES (Uses)  
 (reactive dyeing by, of cellulosic fibers)  
 RN 106620-94-4 CAPLUS  
 CN Pyridinium, 1,1'-[1,4-phenylenebis[imino[6-[[6-[(1,5-disulfo-2-naphthalenyl)azo]-5-hydroxy-7-sulfo-2-naphthalenyl]amino]-1,3,5-triazine-4,2-diyl]]bis[3-sulfo-, bis(inner salt), hexasodium salt (9CI) (CA INDEX NAME)

L4 ANSWER 52 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

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RN 106620-97-7 CAPLUS  
 CN Pyridinium, 3-(aminocarbonyl)-1-[4-[[5-hydroxy-7-sulfo-6-[(1,5,7-trisulfo-2-naphthalenyl)azo]-2-naphthalenyl]amino]-6-[(3-sulphophenyl)amino]-1,3,5-triazin-2-yl]-, inner salt, tetrasodium salt (9C1) (CA INDEX NAME)

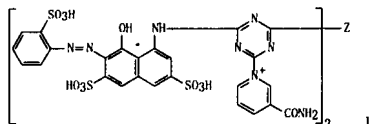
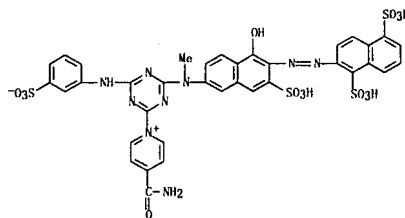
L4 ANSWER 53 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1986:592855 CAPLUS  
 DOCUMENT NUMBER: 105:192855  
 TITLE: Reactive dyes  
 INVENTOR(S): Shirasaki, Toshihiko; Toda, Junji; Sotokoshi, Teruhito; Kojima, Masayoshi  
 PATENT ASSIGNEE(S): Nippon Kayaku Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 12 pp.  
 CODEN: JKKXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 61040367	A	19860226	JP 1984-159236	19840731
PRIORITY APPLN. INFO.:			JP 1984-159236	19840731

GRAPHIC IMAGE:

L4 ANSWER 53 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



## ABSTRACT:

Reactive azo dyes containing (aminocarbonylpyridinio)triazine group were prepared and used for dyeing cotton. Thus, 1-amino-8-hydroxynaphthalene-3,6-disulfonic acid was condensed with cyanuric chloride, coupled with diazotized o-anilinesulfonic acid, condensed with p-phenylenediamine, and treated with nicotinamide to give 1 (Z = p-phenylene), bluish red on cotton.

IT 104701-32-8

RI: TEM (Technical or engineered material use); USES (Uses)  
 (dye, for cotton, manufacture of)

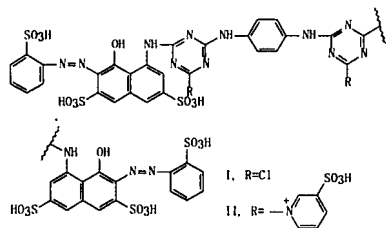
RN 104701-32-8 CAPLUS

CN Pyridinium, 4-(aminocarbonyl)-1-[4-[[6-[(1,5-disulfo-2-naphthalenyl)azo]-5-hydroxy-7-sulfo-2-naphthalenyl]methylamino]-6-[(3-sulphophenyl)amino]-1,3,5-triazin-2-yl]-, inner salt (9C1) (CA INDEX NAME)

L4 ANSWER 54 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN  
 ACCESSION NUMBER: 1986:462207 CAPLUS  
 DOCUMENT NUMBER: 105:62207  
 TITLE: Dyeing of cellulose-containing fibers with reactive azo dyes  
 INVENTOR(S): Orita, Ryuzo; Kojima, Masayoshi; Ogawa, Eiichi; Watanabe, Shigeyuki; Yamamura, Shigeo  
 PATENT ASSIGNEE(S): Nippon Kayaku Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 17 pp.  
 CODEN: JXXXXF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 61012987	A	19860121	JP 1984-131993	19840628

PRIORITY APPLN. INFO.: JP 1984-131993 19840628  
 GRAPHIC IMAGE:



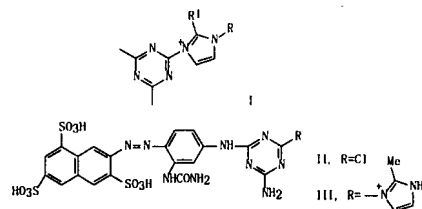
ABSTRACT:  
 Reactive dyes containing  $\geq 1$  s-triazinyl group substituted with quaternary ammonium group-containing substituent (excluding 3-carboxypyridinio) can be used for dip dyeing cellulosic fibers from an aqueous bath at a low temperature (100-150°) in the absence of acid binders. This process is especially effective in dyeing cotton blends with mixed dyes by one-bath-one-step dyeing. Thus, I in water was stirred with a solution of pyridine-3-sulfonic acid in aqueous NaOH at 80° for 16 h to give II, fast bluish red on cotton.

IT 103446-34-0  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (dye, for cotton, manufacture of)  
 RN 103446-34-0 CAPLUS  
 CN Pyridinium, 3-(aminocarbonyl)-1-[4-amino-6-[[6-[(1,5-disulfo-2-naphthalenyl)azo]-5-hydroxy-7-sulfo-2-naphthalenyl]methylamino]-1,3,5-triazin-2-yl]-, inner salt (9CI) (CA INDEX NAME)

L4 ANSWER 55 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN  
 ACCESSION NUMBER: 1986:462206 CAPLUS  
 DOCUMENT NUMBER: 105:62206  
 TITLE: Reactive dyes  
 INVENTOR(S): Omura, Takashi; Morimitsu, Toshihiko; Kayane, Yutaka; Sawamoto, Hirokazu; Takeshita, Akira; Harada, Naoki  
 PATENT ASSIGNEE(S): Sumitomo Chemical Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 22 pp.  
 CODEN: JXXXXF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 61007358	A	19860114	JP 1984-126876	19840620
JP 07023455	B	19950315		

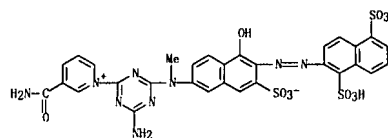
PRIORITY APPLN. INFO.: JP 1984-126876 19840620  
 GRAPHIC IMAGE:



ABSTRACT:  
 Comps. containing  $\geq 1$  fiber-reactive group I [R, R1 = H, (un)substituted C1-20 hydrocarbon group] were prepared and used for dyeing cotton with excellent fastness and buildup properties. Thus, I in water was treated with 2-methylimidazole, adjusted to pH 4.0-4.5, stirred at 80° overnight, and salted to give III, golden yellow on cotton.

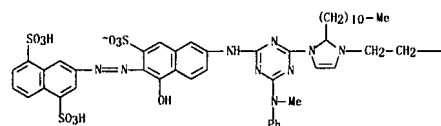
IT 103460-28-2  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (dye, for cotton, manufacture of)  
 RN 103460-28-2 CAPLUS  
 CN 1H-imidazolium, 1-[2-(4,6-diamino-1,3,5-triazin-2-yl)ethyl]-3-[4-[[6-[(4,8-disulfo-2-naphthalenyl)azo]-5-hydroxy-7-sulfo-2-naphthalenyl]amino]-6-(methylphenylamino)-1,3,5-triazin-2-yl]-2-undecyl-, inner salt (9CI) (CA INDEX NAME)

L4 ANSWER 54 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



L4 ANSWER 55 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

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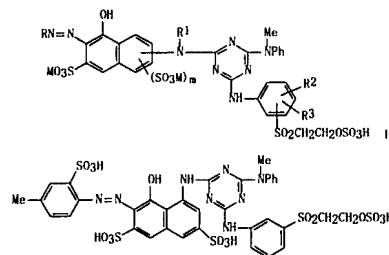
ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

L4 ANSWER 56 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1986:462203 CAPLUS  
 DOCUMENT NUMBER: 105:62203  
 TITLE: Reactive azo dyes  
 INVENTOR(S): Niwa, Toshio; Kato, Yoshiaki  
 PATENT ASSIGNEE(S): Mitsubishi Chemical Industries Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.  
 CODEN: JXXXXF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 60260654	A	19851223	JP 1984-116194	19840606
JP 04001789	B	19920114		

PRIORITY APPLN. INFO.: JP 1984-116194 19840606  
 OTHER SOURCE(S): CASREACT 105:62203  
 GRAPHIC IMAGE:



**ABSTRACT:**  
 Reactive azo dyes I (R = benzene or naphthalene residue with or without sulfo, Me, or MeO substituent; M = H, alkali metal; R1 = H, lower alkyl; R2, R3 = H, Me, MeO, sulfo, m = 0, 1) were prepared and used for dyeing cellulosic fibers in fast orange to red shades. Thus, cyanuric chloride was condensed with 1-amino-8-hydroxynaphthalene-3,6-disulfonic acid and then N-methylaniline; the resulting 1:1:1 condensate was coupled with diazotized 4-methylaniline-2-sulfonic acid; and the coupling product was condensed with 3-H2NC6H4SO2CH2CH2SO3H to give II, bluish red on cotton knit.

IT 103480-90-6  
 RI: TEM (Technical or engineered material use): USES (Uses)  
 (dye, for cotton, manufacture of)  
 RN 103480-90-6 CAPLUS  
 CN 1-Naphthalenesulfonic acid, 2-[[1-hydroxy-6-[[4-(methylphenylamino)-6-[[2-

L4 ANSWER 57 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1986:462202 CAPLUS  
 DOCUMENT NUMBER: 105:62202  
 TITLE: Disazo reactive dyes for cellulose fibers  
 INVENTOR(S): Niwa, Toshio; Kato, Yoshiaki  
 PATENT ASSIGNEE(S): Mitsubishi Chemical Industries Co., Ltd., Japan  
 SOURCE: Ger. Offen. 54 pp.  
 CODEN: GWXXBX  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 3520287	A1	19851212	DE 1985-3520287	19850605
DE 3520287	C2	19870108		
JP 60260655	A	19851223	JP 1984-116192	19840606
JP 04080949	B	19921221		
JP 60260656	A	19851223	JP 1984-116193	19840606
JP 04080950	B	19921221		
JP 60260657	A	19851223	JP 1984-116195	19840606
JP 04080951	B	19921221		
JP 60260658	A	19851223	JP 1984-116196	19840606
JP 04080952	B	19921221		
US 4686286	A	19870811	US 1985-735561	19850517
GB 2159829	A	19851211	GB 1985-14192	19850605
CH 662580	B	19871028		
	A5	19871015	CH 1985-2391	19850606
			JP 1984-116192	A 19840606
			JP 1984-116193	A 19840606
			JP 1984-116195	A 19840606
			JP 1984-116196	A 19840606

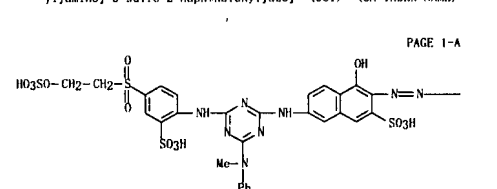
PRIORITY APPLN. INFO.:  
 OTHER SOURCE(S): CASREACT 105:62202  
 GRAPHIC IMAGE:

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

**ABSTRACT:**  
 Comps. of general structure I (Q = monoazo dye radical; R = H, lower alkyl; R1, R2 = H, Me, MeO, SO3M; Z = bivalent aromatic or aliphatic radical; M = H, alkali metal) dye cellulose under the same conditions used to dye polyester with disperse dyes and thus are especially useful for dyeing cellulose-polyester textiles by single bath-single step procedures. I are prepared by reaction of 1 mol dichloro(QN-substituted)triazines(II) with 1 mol QNIR and then 1 mol H2NC10H2(SO2CH2CH2SO3M)R1R2(III); and IV by reaction of 2 mol II with 1 mol H2NHNH2 and then with 2 mol III. A typical dye is V which, with 3'-hydroxyquinophthalone in aqueous medium at pH 8/130°, dyed 50:50 polyester-cotton a fast, deep yellow shade.

IT 103487-92-9 103487-93-0 103487-94-1  
 103488-16-0 103488-17-1 103515-01-1  
 RI: USES (Uses)  
 (reactive dye, for high-temperature dyeing of cotton)  
 RN 103487-92-9 CAPLUS  
 CN Benzoic acid, 3,5-bis[[4-[[[5-hydroxy-7-sulfo-6-[[1-sulfo-2-naphthalenyl]azo]-2-naphthalenyl]amino]-6-[[4-[[2-(sulfoxyethyl)sulfonyl]phenyl]amino]-1,3,5-triazin-2-yl]amino]-3-sulfo-6,2-naphthalenediyl]azo]bis- (9C1) (CA INDEX NAME)

L4 ANSWER 56 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

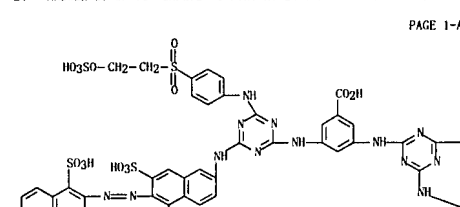


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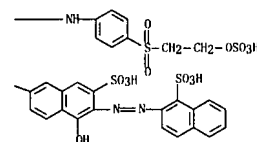


L4 ANSWER 57 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



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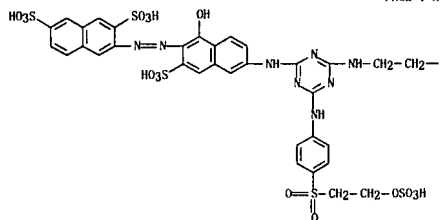
PAGE I-B



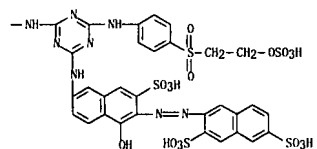
RN 103487-93-0 CAPLUS  
 CN 2,7-Naphthalenedisulfonic acid, 3,3'-[[1,2-ethanediylbis(imino[6-[[4-[[2-(sulfoxyethyl)sulfonyl]phenyl]amino]-1,3,5-triazine-4,2-diyl]imino(1-hydroxy-3-sulfo-6,2-naphthalenediyl)azo]bis- (9C1) (CA INDEX NAME)

L4 ANSWER 57 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

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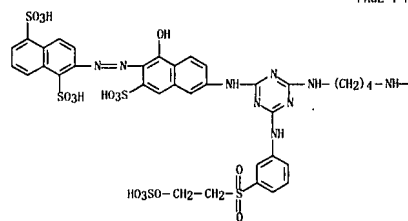
PAGE 1-B



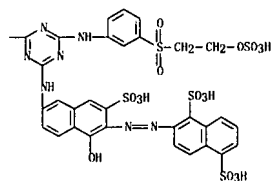
RN 103487-94-1 CAPLUS  
 CN 1,5-Naphthalenedisulfonic acid, 2,2'-[1,4-butanediylbis[imino[6-[[3-[[2-(sulfoxy)ethyl]sulfonyl]phenyl]amino]-1,3,5-triazine-2,4-diyl]bis[imino[1-hydroxy-3-sulfo-6,2-naphthalenediyl]azo]]bis- (9CI) (CA INDEX NAME)

L4 ANSWER 57 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

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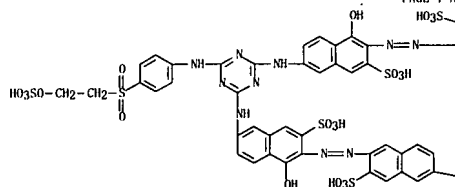
PAGE 1-B



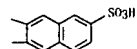
RN 103488-16-0 CAPLUS  
 CN 2,7-Naphthalenedisulfonic acid, 3,3'-[6-[[4-[[2-(sulfoxy)ethyl]sulfonyl]phenyl]amino]-1,3,5-triazine-2,4-diyl]bis[imino[1-hydroxy-3-sulfo-6,2-naphthalenediyl]azo]]bis- (9CI) (CA INDEX NAME)

L4 ANSWER 57 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

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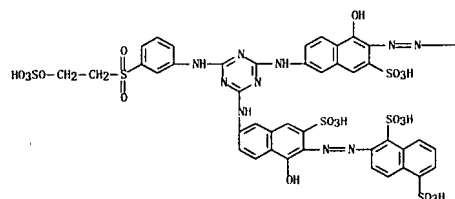


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RN 103488-17-1 CAPLUS  
 CN 1,5-Naphthalenedisulfonic acid, 2,2'-[6-[[3-[[2-(sulfoxy)ethyl]sulfonyl]phenyl]amino]-1,3,5-triazine-2,4-diyl]bis[imino[1-hydroxy-3-sulfo-6,2-naphthalenediyl]azo]]bis- (9CI) (CA INDEX NAME)

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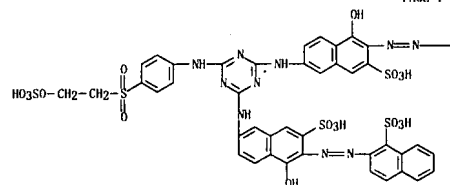
L4 ANSWER 57 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

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RN 103515-01-1 CAPLUS  
 CN 1-Naphthalenesulfonic acid, 2,2'-[6-[[3-[[2-(sulfoxy)ethyl]sulfonyl]phenyl]amino]-1,3,5-triazine-2,4-diyl]bis[imino[1-hydroxy-3-sulfo-6,2-naphthalenediyl]azo]]bis- (9CI) (CA INDEX NAME)

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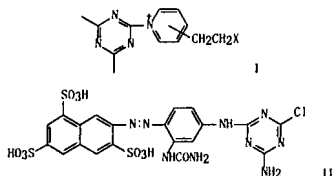
PAGE 1-B



L4 ANSWER 58 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN  
 ACCESSION NUMBER: 1986:226327 CAPLUS  
 DOCUMENT NUMBER: 104:226327  
 TITLE: Dyeing and printing of fibrous materials with triazine compounds  
 INVENTOR(S): Omura, Takashi; Kaneya, Yutaka; Takahashi, Sho; Miyamoto, Tetsuya; Takeshita, Akira; Harada, Naoki; Otake, Katsumasa  
 PATENT ASSIGNEE(S): Sumitomo Chemical Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 20 pp.  
 CODEN: JRXAXF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 60208366	A	19851019	JP 1984-66574	19840402
JP 05054511	B	19930812		
PRIORITY APPLN. INFO.:			JP 1984-66574	19840402

GRAPHIC IMAGE:



ABSTRACT:  
 Dyes are prepared which contain fiber-reactive groups I, where X = OH, sulfo, or sulfato groups. Thus, II reacted with γ-(2-hydroxyethyl)pyridine to give the corresponding I-containing dye, which was used to dye cotton and cotton-polyester blends.

IT 102199-11-1  
 RL: MSC (Miscellaneous)  
 (dyes, fiber-reactive)  
 RN 102199-11-1 CAPLUS  
 CN Pyridinium, 1-[4-[[6-[(4,8-disulfo-2-naphthalenyl)azo]-5-hydroxy-7-sulfo-2-naphthalenyl]amino]-6-(methylphenylamino)-1,3,5-triazin-2-yl]-4-[2-(sulfoxy)ethyl]-, inner salt (9C1) (CA INDEX NAME)

L4 ANSWER 59 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN  
 ACCESSION NUMBER: 1986:150787 CAPLUS  
 DOCUMENT NUMBER: 104:150787  
 TITLE: Reactive azo dyes  
 INVENTOR(S): Niwa, Toshio; Kato, Yoshiaki  
 PATENT ASSIGNEE(S): Mitsubishi Chemical Industries Co., Ltd., Japan  
 SOURCE: Ger. Offen., 58 pp.  
 CODEN: GWXXBX  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 3512690	A1	19851017	DE 1985-3512690	19850409
DE 3512690	C2	19851123		
JP 60215060	A	19851028	JP 1984-70549	19840409
JP 04080948	B	19921221		
JP 60226557	A	19851111	JP 1984-83569	19840425
JP 05001308	B	19930107		
JP 60229957	A	19851115	JP 1984-85509	19840427
JP 05078590	B	19931029		
GB 2160883	A	19860102	GB 1985-9081	19850409
GB 2160883	B	19870826		
US 4645832	A	19870224	US 1985-721514	19850409
CH 663215	A5	19871130	CH 1985-1515	19850409
PRIORITY APPLN. INFO.:			JP 1984-70549	A 19840409
			JP 1984-83569	A 19840425
			JP 1984-85509	A 19840427

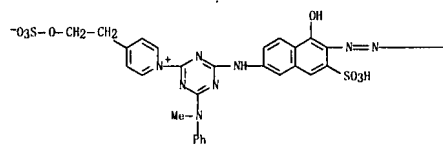
OTHER SOURCE(S): CASREACT 104:150787  
 GRAPHIC IMAGE: For diagram(s), see printed CA issue.

ABSTRACT:  
 Described are reactive disazo (I) and trisazo compds. (II) which dye cellulosic fibers under the same conditions and pH used to dye polyester fibers with disperse dyes, and thus are especially useful for dyeing cellulose-polyester blends by a single-bath method. In structures I and II, M = H or an alkali metal; R, R2, R3, R4, R5, R6, and R8 = H or a substituent (e.g. lower alkyl, lower alkoxy); R1 and R7 = lower alkyl, lower alkoxy, or sulfo; Q = Cl, F, amino, MeO, or PhO; Q1 = Q if Q2 = (un)substituted [(sulfo)ethoxy]sulfonyl]anilino (Q3), or Q1 = Cl or F if Q2 = aliphatic or aromatic amino, MeO, or PhO; Q2 = Q3, aliphatic or aromatic amino, MeO, or PhO; m = 1, 2, or 3; n1 = 2 or 3; and n = 0 or 1. Thus, a mixture of 0.2 g III (prepared by diazotization of 3,6,8,2-(HO3S)3C10H4N:NC6H2(OMe)(NH2)Me-3,4,6 and coupling with the appropriate II acid derivative) and 0.2 g 2,4,6-(O2N)2C6H2N:NC6H3(NHAc)NE12-2,4 in an aqueous dyebath at 130° and pH 8 (buffered) dyed 50:50 cotton-polyester a uniform blue shade in 1 h. The synthesis and/or dyeing properties of numerous other I and II are described in detailed examples and in tables.

IT 101308-66-1 101362-40-7 101381-88-8  
 RL: TEN (Technical or engineered material use): USES (Uses)  
 (dye, for cotton)  
 RN 101308-66-1 CAPLUS  
 CN 1,5-Naphthalenedisulfonic acid, 3-[[4-[[3-ethyl-4-[[1-hydroxy-6-[[4-[[3-methoxyphenyl]amino]-6-[[2-sulfo-4-[[2-(sulfoxy)ethyl]sulfonyl]phenyl]amino]-1,3,5-triazin-2-yl]amino]-3,5-disulfo-2-naphthalenyl]azo]-1-naphthalenyl]azo]-5-methoxy-2-methylphenyl]azo]- (9C1) (CA INDEX NAME)

L4 ANSWER 58 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 1-A

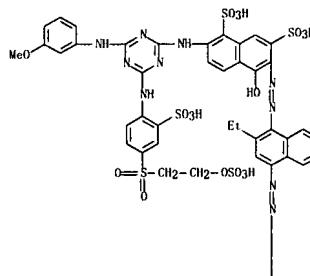


PAGE 1-B

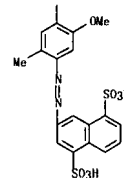


L4 ANSWER 59 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

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PAGE 2-A

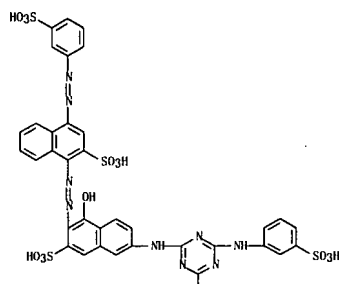


RN 101362-40-7 CAPLUS  
 CN 2-Naphthalenesulfonic acid, 4-hydroxy-7-[[4-[[3-[[2-(sulfoxy)ethyl]sulfonyl]phenyl]amino]-6-[[3-sulfophenyl]amino]-1,3,5-triazin-2-yl]amino]-3-[[2-sulfo-4-[[3-sulfophenyl]azo]-1-naphthalenyl]azo]- (9C1) (CA INDEX NAME)

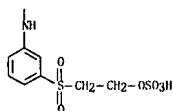


L4 ANSWER 59 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 1-A



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RN 101381-88-B CAPLUS  
CN 1,7-Naphthalenedisulfonic acid, 6-[[4-[[4-(2,5-disulphophenyl)azo]-2-sulphophenyl]azo]-2-ethoxy-1-naphthalenyl]azo]-5-hydroxy-2-[[4-[[4-nitrophenyl]amino]-6-[[2-sulfo-4-[[2-(sulfoxyethyl)sulfonyl]phenyl]amino]-1,3,5-triazin-2-yl]amino]-9Cl) (CA INDEX NAME)

L4 ANSWER 60 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1985:524991 CAPLUS  
DOCUMENT NUMBER: 103:124991  
TITLE: Reactive disazo dyes  
PATENT ASSIGNEE(S): Nippon Kayaku Co., Ltd., Japan  
SOURCE: Jpn. Kokai Tokkyo Koho, 10 pp.  
CODEN: JXXXXF  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 60086169	A	19850515	JP 1983-194357	19831019
JP 04020949	B	19920407	JP 1983-194357	19831019

PRIORITY APPL. INFO.:  
GRAPHIC IMAGE:

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

## ABSTRACT:

The title dyes are prepared having a free-acid form I [R = Ph with 1 or 2 sulfo or carboxy groups and optionally Me, MeO, or Cl group, naphthyl with 1-3 sulfo groups: R1, R2, R3 = H, Me; R4 = carboxypyridine, Cl; F: Z = (CH2)2-3, CH2CH2OCH2CH2, CH2CH(OH)CH2, R5R6R7CH (R5, R6, R7 = H, Me, sulfo, carboxy; excluding o-phenylene moiety), C6H4Z1C6H4 (Z1 = O, SO2, NHCO, NH), 2,2'-disulfo-biphenyl-4,4'-diyl, 2,2'-disulfo-tolylene-4,4'-diyl, 2-sulfo-diphenylamine-4,4'-diyl; n = 1, 2] and used for dyeing cotton and blends in orange to red shades. Thus, II (R = Cl) [98213-83-3] in water was treated with nicotinic acid [59-67-6] at pH 6-6.5 (NaOH) at 90° for 5 h and salted to give II (R = 3-carboxypyridinium, dichloride, Na salt) [98213-84-4], orange on cotton.

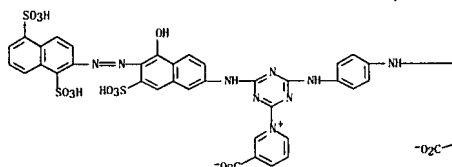
IT 98213-75-3 98214-45-0 98214-48-3

98214-51-8  
RI: TEM (Technical or engineered material use): USES (Uses)  
(dye, for cotton, manufacture of)

RN 98213-75-3 CAPLUS

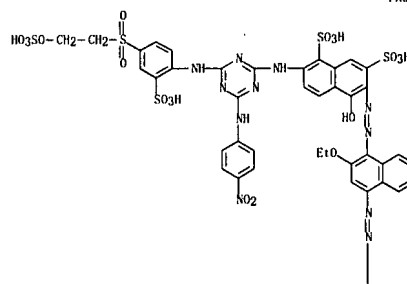
CN Pyridinium, 1,1'-[1,4-phenylenebis[imino[6-[[[5-hydroxy-7-sulfo-2-naphthalenyl]azo]-2-naphthalenyl]amino]-1,3,5-triazine-4,2-diyl]]bis[3-carboxy-, bis(inner salt) (9Cl) (CA INDEX NAME)

PAGE 1-A

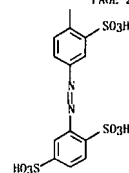


L4 ANSWER 59 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 1-A

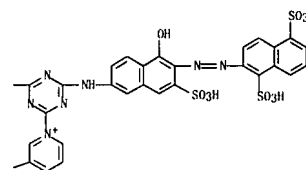


PAGE 2-A



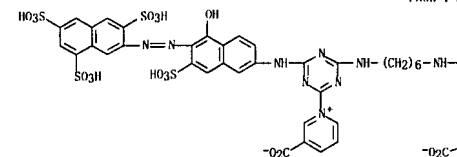
L4 ANSWER 60 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 1-B

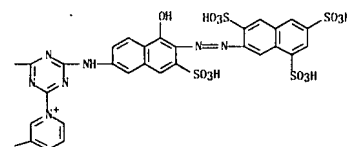


RN 98214-45-0 CAPLUS  
CN Pyridinium, 1,1'-[1,6-hexanediylbis[imino[6-[[5-hydroxy-7-sulfo-6-[[3,6,8-trisulfo-2-naphthalenyl]azo]-2-naphthalenyl]amino]-1,3,5-triazine-4,2-diyl]]bis[3-carboxy-, bis(inner salt) (9Cl) (CA INDEX NAME)

PAGE 1-A



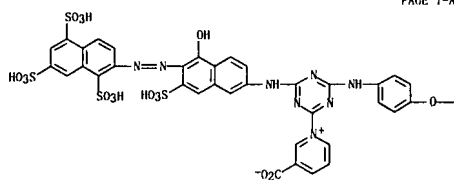
PAGE 1-B



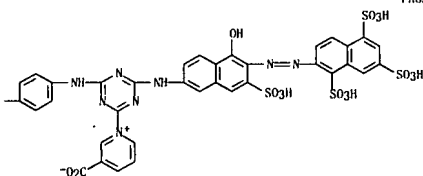
RN 98214-48-3 CAPLUS  
CN Pyridinium, 1,1'-[oxybis[4,1-phenylenebis[imino[6-[[5-hydroxy-7-sulfo-6-[[1,5,7-trisulfo-2-naphthalenyl]azo]-2-naphthalenyl]amino]-1,3,5-triazine-4,2-diyl]]bis[3-carboxy-, bis(inner salt) (9Cl) (CA INDEX NAME)

L4 ANSWER 60 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

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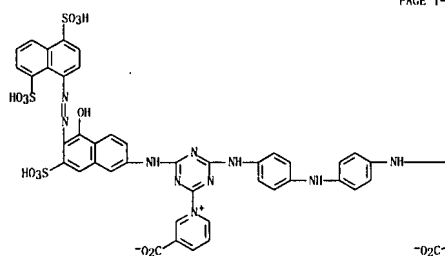
PAGE 1-B



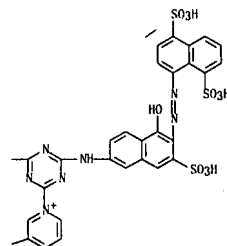
RN 98214-51-8 CAPLUS  
 CN Pyridinium, 1,1'-[iminobis(4,1-phenyleneimino)-6-[[4-[(4,8-disulfo-1-naphthalenyl)azo]-5-hydroxy-7-sulfo-2-naphthalenyl]amino]-1,3,5-triazine-4,2-diyl]]bis[3-carboxy-, bis(inner salt) (9C1) (CA INDEX NAME)

L4 ANSWER 60 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

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PAGE 1-B

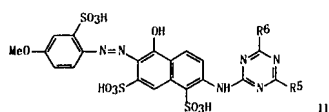
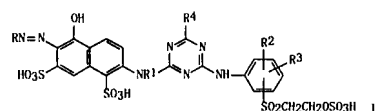


L4 ANSWER 61 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1985:115136 CAPLUS  
 DOCUMENT NUMBER: 102:115136  
 TITLE: Reactive dyes for cellulose fibers  
 PATENT ASSIGNEE(S): Mitsubishi Chemical Industries Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.  
 CODEN: JKXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 59179666	A	19841012	JP 1983-55428	19830331
JP 04064345	B	19921014	JP 1983-55428	19830331

PRIORITY APPL. INFO.:  
 GRAPHIC IMAGE:



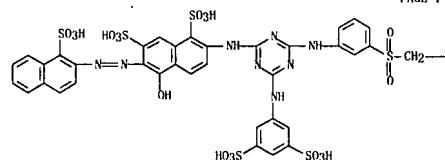
ABSTRACT:  
 Reactive dyes which dye natural (or regenerated) cellulose fibers deep orange to scarlet are comds. of the formula I (R = benzene or naphthalene-type diazo component residue; R1 = H, Me, Et; R2, R3 = H, Me, MeO, SO3H; R4 = aliphatic or aromatic amino residue having 1-2 SO3H). The dyes show excellent dyeing affinity and fastness to chlorine, light, and perspiration. Thus, II (R5 = R6 = Cl) [95211-35-1] was treated with 3-aminobenzenesulfonic acid [121-47-1] and then with m-H2NC6H4SO2CH2CH2OSO3H [2494-88-4] to obtain II (R5 = m-H2NC6H4SO3H; R6 = m-H2NC6H4SO2CH2CH2OSO3H) [95211-34-0], scarlet on cotton.

IT 95211-26-0 95211-27-1 95211-28-2  
 95211-29-3 95211-30-6 95211-31-7  
 95211-32-8 95211-33-9  
 RL: TEM (Technical or engineered material use): USES (Uses)  
 (dye, for cotton)

RN 95211-26-0 CAPLUS  
 CN 1,7-Naphthalenedisulfonic acid, 2-[[4-[(3,5-disulphophenyl)amino]-6-[[3-[[2-(sulfoxy)ethyl]sulfonyl]phenyl]amino]-1,3,5-triazin-2-yl]amino]-5-hydroxy-6-[(1-sulfo-2-naphthalenyl)azo]- (9C1) (CA INDEX NAME)

L4 ANSWER 61 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 1-A

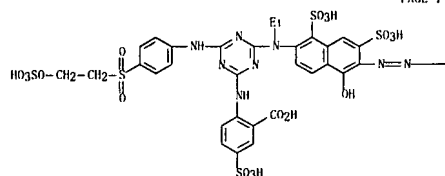


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-CH2-OSO3H

RN 95211-27-1 CAPLUS  
 CN Benzoic acid, 2-[[4-[[ethyl[5-hydroxy-1,7-disulfo-6-[(1-sulfo-2-naphthalenyl)azo]-2-naphthalenyl]amino]-6-[[4-[[2-(sulfoxy)ethyl]sulfonyl]phenyl]amino]-1,3,5-triazin-2-yl]amino]-5-sulfo- (9C1) (CA INDEX NAME)

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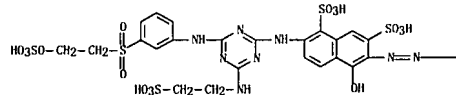
PAGE 1-B



RN 95211-28-2 CAPLUS  
 CN 1,5-Naphthalenedisulfonic acid, 2-[[1-hydroxy-3,5-disulfo-6-[[4-[[2-(sulfoxy)ethyl]amino]-6-[[3-[[2-(sulfoxy)ethyl]sulfonyl]phenyl]amino]-1,3,5-triazin-2-yl]amino]-2-naphthalenyl]azo]- (9C1) (CA INDEX NAME)

L4 ANSWER 61 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

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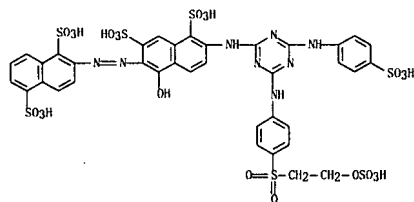


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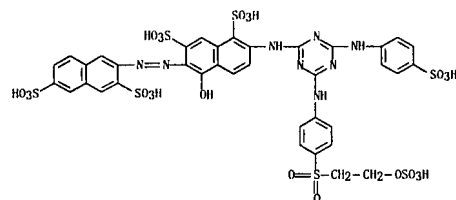
CN 1,5-Naphthalenedisulfonic acid, 2-[[[1-hydroxy-3,5-disulfo-6-[[[4-[[2-(sulfoxyethyl)sulfonyl]phenyl]amino]-6-[[4-(sulphonyl)amino]-1,3,5-triazin-2-yl]amino]-3,5-disulfo-2-naphthalenyl]azo]- (9C1) (CA INDEX NAME)



RN 95211-30-6 CAPLUS

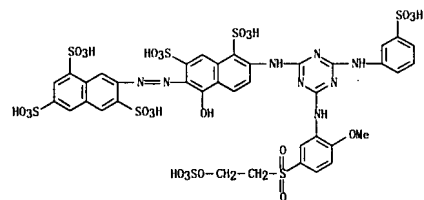
CN 1,5-Naphthalenedisulfonic acid, 2-[[[1-hydroxy-6-[[methyl-4-[[2-(sulfoxyethyl)sulfonyl]phenyl]amino]-6-[[3-[[2-(sulfoxyethyl)sulfonyl]phenyl]amino]-1,3,5-triazin-2-yl]amino]-3,5-disulfo-2-naphthalenyl]azo]- (9C1) (CA INDEX NAME)

L4 ANSWER 61 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



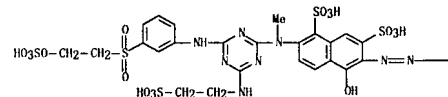
RN 95211-33-9 CAPLUS

CN 1,3,6-Naphthalenetrisulfonic acid, 7-[[[1-hydroxy-6-[[[4-[[2-methoxy-5-[[2-(sulfoxyethyl)sulfonyl]phenyl]amino]-6-[[3-(sulphonyl)amino]-1,3,5-triazin-2-yl]amino]-3,5-disulfo-2-naphthalenyl]azo]- (9C1) (CA INDEX NAME)



L4 ANSWER 61 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

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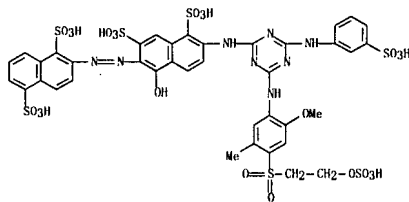


PAGE 1-B



RN 95211-31-7 CAPLUS

CN 1,5-Naphthalenedisulfonic acid, 2-[[[1-hydroxy-6-[[[4-[[2-methoxy-5-methyl-4-[[2-(sulfoxyethyl)sulfonyl]phenyl]amino]-6-[[3-(sulphonyl)amino]-1,3,5-triazin-2-yl]amino]-3,5-disulfo-2-naphthalenyl]azo]- (9C1) (CA INDEX NAME)



RN 95211-32-8 CAPLUS

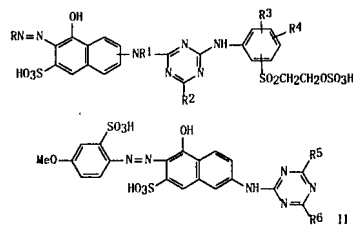
CN 1,7-Naphthalenedisulfonic acid, 6-[[[3,6-disulfo-2-naphthalenyl]azo]-5-hydroxy-2-[[[4-[[[2-(sulfoxyethyl)sulfonyl]phenyl]amino]-6-[[4-(sulphonyl)amino]-1,3,5-triazin-2-yl]amino]- (9C1) (CA INDEX NAME)

L4 ANSWER 62 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1984:193522 CAPLUS  
 DOCUMENT NUMBER: 100:193522  
 TITLE: Reactive dyes for cellulose fibers  
 PATENT ASSIGNEE(S): Mitsubishi Chemical Industries Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 5 pp.  
 CODEN: JXAXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 58191755	A	19831109	JP 1982-75856	19820506
JP 03034505	B	19910522	JP 1982-75856	19820506

PRIORITY APPL. INFO.:  
 GRAPHIC IMAGE:



## ABSTRACT:

Title dyes have the formula I (R = benzene- or naphthalene-type diazo component residue; R1 = H, Me, Et; R2 = aliphatic or aromatic amino moiety having 1-2 SO3H groups; R3, R4 = H, Me, OMe, SO3H). The dyes are useful for dyeing cellulose fibers, especially natural and regenerated cellulose fibers, fast dark orange or pale red shades. Thus, II (R5 = NHC6H4SO3H-3; R6 = Cl) [59641-46-2] was condensed with 3-[[[p-sulfatoethyl)sulfonyl]aniline [2494-88-4] to give II (R5 = NHC6H4SO3H-3; R6 = NHC6H4SO2CH2CH2SO3H-3) [89994-51-4]. The dye was used to dye cotton fabric pale red at 50° in the presence of Glauber's salt and showed high exhaustion.

IT 89930-41-6 89930-42-7 89930-43-8

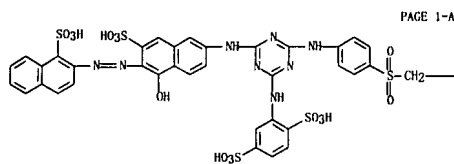
RL: USES (Uses)

(reactive dye, for cellulose fibers)

RN 89930-41-6 CAPLUS

CN 1,4-Benzenedisulfonic acid, 2-[[[4-[[[5-hydroxy-7-sulfo-6-[[1-sulfo-2-naphthalenyl]azo]-2-naphthalenyl]amino]-6-[[4-[[2-(sulfoxyethyl)sulfonyl]phenyl]amino]-1,3,5-triazin-2-yl]amino]- (9C1) (CA INDEX NAME)

L4 ANSWER 62 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

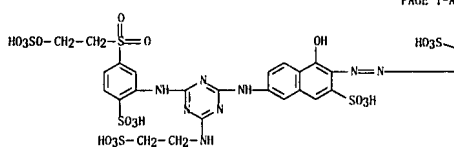


PAGE 1-B

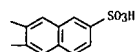
—CH<sub>2</sub>—OSO<sub>3</sub>H

RN 89930-42-7 CAPLUS

CN 2,7-Naphthalenedisulfonic acid, 3-[[[1-hydroxy-3-sulfo-6-[[4-[[2-(sulfoethyl)amino]-6-[[2-sulfo-5-[[2-(sulfoxy)ethyl]sulfonyl]phenyl]amino]-1,3,5-triazin-2-yl]amino]-2-naphthalenyl]azo]- (9CI) (CA INDEX NAME)



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RN 89930-43-8 CAPLUS

CN 1,5-Naphthalenedisulfonic acid, 3-[[[6-[[ethyl[4-[[4-[[2-(sulfoxy)ethyl]sulfonyl]phenyl]amino]-6-[[4-sulfophenyl]amino]-1,3,5-triazin-2-yl]amino]-1-hydroxy-3-sulfo-2-naphthalenyl]azo]- (9CI) (CA INDEX NAME)

L4 ANSWER 63 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1984:105043 CAPLUS

DOCUMENT NUMBER: 100:105043

TITLE: Dyeing of cellulose fibers or cellulose mixed fibers

INVENTOR(S): Miyamoto, Masakatsu; Suzuki, Yoshiharu; Ojima, Mayayoshi; Iizuka, Yutaka; Orita, Ryuzo; Matsuo, Tadashi

PATENT ASSIGNEE(S): Nippon Kayaku Co., Ltd., Japan

SOURCE: Ger. Offen., 58 pp.

CODEN: GWXXBX

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

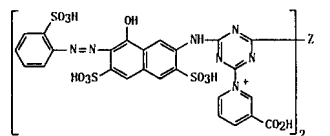
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 3314663	A1	19831027	DE 1983-3314663	19830422
DE 3314663	C2	19941020		
JP 58186682	A	19831031	JP 1982-69584	19820427
US 4453945	A	19840612	US 1983-486520	19830419
GB 2125443	A	19840307	GB 1983-10726	19830420
GB 2125443	B	19860723		
FR 2525646	A1	19831028	FR 1983-6866	19830426
FR 2525646	B1	19860711		
CH 672387	A3	19891130	CH 1983-2233	19830426
CH 672387	B5	19900531		
CH 672795	A5	19891229	CH 1989-369	19830426
CH 672794	A5	19891229	CH 1989-370	19830426
GB 2160213	A	19851218	GB 1985-11645	19850508
GB 2160213	B	19860723		
GB 2165852	A	19860423	GB 1985-12205	19850514
GB 2165852	B	19861008		

PRIORITY APPLN. INFO.: JP 1982-69584 A 19820427

GB 1983-10726 A3 19830420

CH 1983-2233 A 19830426

GRAPHIC IMAGE:



ABSTRACT:

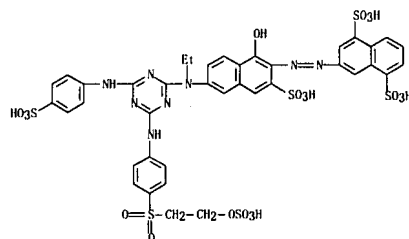
Cellulose fibers or their blends are dyed by an exhaustion process using reactive dyes having 21 triazine groups containing a  $\pi$ -carboxypyridinium group or its salt in an aqueous dye bath at pH 4-10 and 95-150°. Thus, a dye bath containing 0.5 part 1, Z = 4-NIC6H4NH (88480-47-1) and 1 part C. 1, Diaperse Red 164 was used to dye a cotton-polyester textile at 140° to give a deeply dyed textile with both components dyed in the same shade with good fastness properties.

IT 88458-63-3

RL: USES (Uses)

(dye, for reactive dyeing of cellulosic blend fibers)

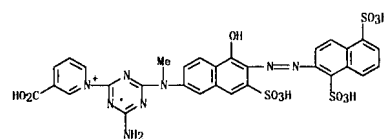
L4 ANSWER 62 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



L4 ANSWER 63 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

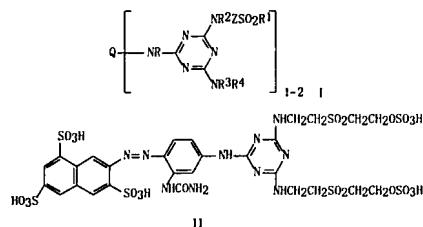
RN 88458-63-3 CAPLUS

CN Pyridinium, 1-[4-amino-6-[[6-[[1,5-disulfo-2-naphthalenyl]azo]-5-hydroxy-7-sulfo-2-naphthalenyl]methylamino]-1,3,5-triazin-2-yl]-3-carboxy-, chloride (9CI) (CA INDEX NAME)

● Cl<sup>-</sup>

L4 ANSWER 64 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN  
 ACCESSION NUMBER: 1983:524072 CAPLUS  
 DOCUMENT NUMBER: 99:124072  
 TITLE: Sulfonyl group-containing reactive dyes  
 INVENTOR(S): Scheib, Peter; Sailer, Herbert  
 PATENT ASSIGNEE(S): Ciba-Geigy A.-G., Swiss.  
 SOURCE: Eur. Pat. Appl., 66 pp.  
 CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

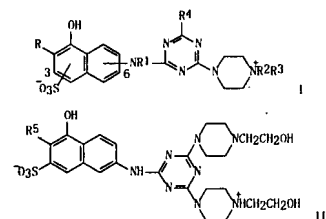
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 76782	A2	19830413	EP 1982-810402	19820927
EP 76782	A3	19830727		
EP 76782	B1	19860305		
R: CH, DE, FR, GB, IT, LI				
JP 58071957	A	19830428	JP 1982-172547	19821002
JP 60017457	B	19850502		
PRIORITY APPL. INFO.: MARPAT 99:124072			CH 1981-6353	A 19811002
OTHER SOURCE(S):				
GRAPHIC IMAGE:				



ABSTRACT:  
 Reactive dyes are prepared which are especially suitable for exhaustion dyeing at low temps., e.g. of cotton, and are represented by general structure I where Q is the residue of a sulfo group-containing organic dye, R = H or optionally substituted C1-4 alkyl, Z = optionally substituted aliphatic or aromatic bridging group, R1 = CH:CH2 or CH2CH2K (K = group eliminable by alkali), R2 = H or optionally substituted hydrocarbyl group, and R3 and R4 = H or optionally substituted hydrocarbyl. Thus, reaction of 7-(4-amino-2-ureidophenylazo)-1,3,6-naphthalenetrisulfonic acid [28566-82-7] with cyanuric fluoride [675-14-9] at 0-5° with H2NCH2CH2SO2CH2CH2OH [24304-83-4] at 20-25° then at 40°, and finally with H2SO4 gave II [86806-65-7] which dyed cotton reddish yellow shades by the low-temperature method. The preparation of other dyes is described.

L4 ANSWER 65 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN  
 ACCESSION NUMBER: 1983:55553 CAPLUS  
 DOCUMENT NUMBER: 98:55553  
 TITLE: Water-soluble triazine compounds and their use as azo dyes and azo coupling components  
 INVENTOR(S): Stoeck, Frank Michael; Nickel, Horst  
 PATENT ASSIGNEE(S): Bayer A.-G., Fed. Rep. Ger.  
 SOURCE: Ger. Offen., 31 pp.  
 CODEN: GWXXBX  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

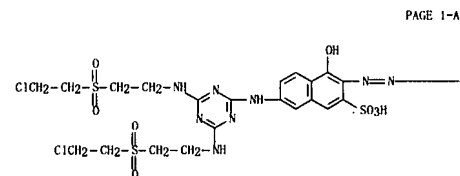
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 3114088	A1	19821028	DE 1981-3114088	19810408
EP 65595	A2	19821201	EP 1981-106799	19810901
EP 65595	A3	19830420		
EP 65595	B1	19860226		
R: CH, DE, FR, GB, IT, NL, SE				
JP 57179170	A	19821104	JP 1982-53964	19820402
FI 8201216	A	19821009	FI 1982-1216	19820406
BR 8201957	A	19830308	BR 1982-1957	19820406
CA 1187078	A1	19850514	CA 1982-400543	19820406
US 4544737	A	19851001	US 1984-586903	19840309
PRIORITY APPL. INFO.: MARPAT 98:55553			DE 1981-3114088	A 19810408
OTHER SOURCE(S):			US 1982-360287	A2 19820322
GRAPHIC IMAGE:				



ABSTRACT:  
 Comps. of general structure I are prepared, where R = H or azo dye residue, R1 = H or alkyl, R2 and R3 = H, alkyl, alkenyl, or aralkyl, and R4 = halogen, OH, alkoxy, alkyl, aryl, amino, or substituted amino. I (R = H) are azo couplers, and I (R = azo residue) are especially useful as fast dyes for paper. Thus, condensation of cyanuric chloride [108-77-0] with N-methylpiperazine [109-01-3] at 40-50° followed by J acid [87-02-5] at 95° gave I (R = R1 = R2 = H, R3 = Me, R4 = 4-methyl-1-piperazinyl; 3-SO3-, 6-NR1) [84269-19-2] which, when acidified with HCl to pH 2, can be directly used for coupling. A red dye for paper, II (R5 = 4-MeOC6H4N) (III) [84269-21-6], was prepared by coupling diazotized 4-methoxyaniline [104-94-9] with II (R5 = H) [84269-20-5]. A concentrated solution of III, stable at low temperature, was prepared by dissolving III in H3PO4 containing HOAc and lactic acid.

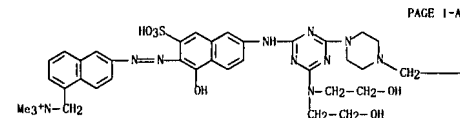
L4 ANSWER 64 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

IT 86806-62-4P  
 RL: IMF (Industrial manufacture); RCT (Reactant); TEM (Technical or engineered material use); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)  
 (manufacture of, as reactive dye for cotton)  
 RN 86806-62-4 CAPLUS  
 CN 1,5-Naphthalenedisulfonic acid, 2-[[6-[[4,6-bis[[2-[(2-chloroethyl)sulfonyl]ethyl]amino]-1,3,5-triazin-2-yl]amino]-1-hydroxy-3-sulfo-2-naphthalenyl]azo]- (9CI) (CA INDEX NAME)



L4 ANSWER 65 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

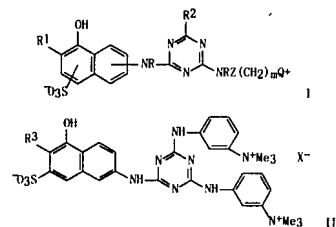
IT 84269-23-8P  
 RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (manufacture of, as dye for paper)  
 RN 84269-23-8 CAPLUS  
 CN 1-Naphthalenemethanaminium, 6-[[6-[[4-bis(2-hydroxyethyl)amino]-6-[4-(2-hydroxyethyl)-1-piperazinyl]-1,3,5-triazin-2-yl]amino]-1-hydroxy-3-sulfo-2-naphthalenyl]azo]-N,N,N-trimethyl-, chloride (9CI) (CA INDEX NAME)



L4 ANSWER 66 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN  
 ACCESSION NUMBER: 1983:55552 CAPLUS  
 DOCUMENT NUMBER: 98:55552  
 TITLE: Water-soluble triazine compounds and their use as azo dyes and coupling components  
 INVENTOR(S): Nickel, Horst; Wild, Peter; Stoehr, Frank Michael  
 PATENT ASSIGNEE(S): Bayer A.-G., Fed. Rep. Ger.  
 SOURCE: Ger. Offen., 30 pp.  
 CODEN: GWXXBX  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 3114087	A1	19821028	DE 1981-3114087	19810408
EP 62825	A2	19821020	EP 1982-102617	19820329
EP 62825	A3	19830601		
EP 62825	B1	19870311		
R: CH, DE, FR, GB				
JP 57179171	A	19821104	JP 1982-53965	19820402
JP 04056036	B	19920907		
US 4839468	A	19890613	US 1984-670683	19841113
PRIORITY APPLN. INFO.:			DE 1981-3114087	A 19810408
			US 1982-360288	A2 19820322
			US 1984-607332	A1 19840504

GRAPHIC IMAGE:



ABSTRACT:  
 Comps. of general structure I are prepared, where R = H or alkyl (especially Me), R1 = H or azo dye residue, R2 = halogen, OH, alkoxy, alkyl, aryl, amino, or substituted amino, Z = arylene, m = 0 or 1, and Q+ = ammonium group. I (R1 = H) are azo couplers, and I (R1 = azo residue) are especially useful as fast dyes for paper. Thus, condensation of cyanuric chloride [108-77-0] with 3-H2N-6-CH3-4-Cl- [6375-71-9] at 0-50° and at 40-50°, and reaction of the resultant monochlorotriazine derivative [84269-24-9] with J acid [87-02-5] at 80-90° gave II (R3 = H, X = Cl) (III) [84269-25-0].

L4 ANSWER 67 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN  
 ACCESSION NUMBER: 1982:564520 CAPLUS  
 DOCUMENT NUMBER: 97:164520  
 TITLE: Disazo triazine copper complex dyes  
 INVENTOR(S): Tabei, Toru  
 PATENT ASSIGNEE(S): Nippon Kayaku Co., Ltd., Japan  
 SOURCE: Patentschrift (Switz.), 20 pp. Division of Patentschrift (Switz.) Appl. No. 17, 144.  
 CODEN: SWXXAS  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 4  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CH 628920	A5	19820331	CH 1979-11289	19791219
JP 49080373	A	19740802	JP 1972-121694	19721206
JP 52015712	B	19770502		
JP 49081437	A	19740806	JP 1972-123701	19721209
JP 55038374	B	19801003		
JP 50026830	A	19750319	JP 1973-77066	19730710
JP 55038375	B	19801003		
JP 50030930	A	19750327	JP 1973-82271	19730719
JP 55038376	B	19801003		
PRIORITY APPLN. INFO.:			JP 1972-121694	A 19721206
			JP 1972-123701	A 19721209
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			JP 1973-82271	A 19730719
			CH 1973-17144	19731206

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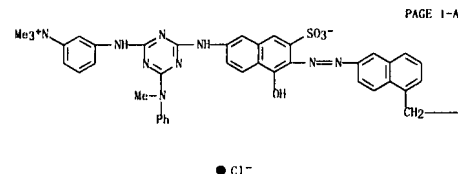
\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

ABSTRACT:  
 Azo dyes (I: R = optionally substituted benzene residue not containing OH, CO2H, MeO, EtO groups ortho to azo bond; sulfo group-substituted naphthalene or stilbene; azo chromophore: R1, R3 = H, Me; R1 = morpholino, diethanolamino, ethanolamino, MeN; R4 = H, SO3H; SO3H meta or para to azo group) are prepared by reaction of cyanuric halide in the presence of I part acid binder based on mol. ratios of reactants with I part (phenylazo)naphthylamine copper complex with I part RN:N-substituted hydroxysulfonaphthylamine and then with I part R2H. These water-soluble red dyes have a high affinity for paper and cellulosic fibers. A typical compound prepared was II.

IT 82688-29-7P  
 RL: IMF (Industrial manufacture): PREP (Preparation)  
 (preparation of)  
 RN 82688-29-7 CAPLUS  
 CN Cuprate(4-), [4-hydroxy-7-[[4-[[5-hydroxy-6-[(2-hydroxy-5-sulphophenyl)azo]-7-sulfo-2-naphthalenyl]amino]-6-[(2-hydroxyethyl)amino]-1,3,5-triazin-2-yl]amino]-3-[(6-sulfo-2-naphthalenyl)azo]-2-naphthalenesulfonate(6-)]-, tetrahydrogen (9C1) (CA INDEX NAME)

L4 ANSWER 66 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)  
 Coupling of III with diazotized 4-chloroaniline [106-47-8] gave II (R3 = 4-ClC6H4N; X = OAc) [84269-27-2], an orange dye for paper.

IT 84269-29-4P  
 RL: IMF (Industrial manufacture): TEM (Technical or engineered material use); PREP (Preparation): USES (Uses)  
 (manufacture of, as dye for paper)  
 RN 84269-29-4 CAPLUS  
 CN 1-Naphthulenemethanaminium, 6-[[1-hydroxy-6-[[4-(methylphenylamino)-6-[[3-(trimethylammonio)phenylamino]-1,3,5-triazin-2-yl]amino]-3-sulfo-2-naphthalenyl]azo]-N,N,N-trimethyl-, inner salt, chloride (9C1) (CA INDEX NAME)

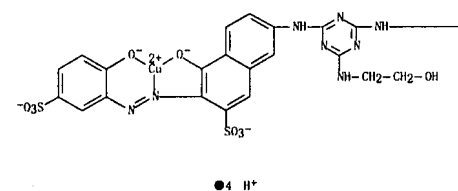


PAGE 1-A

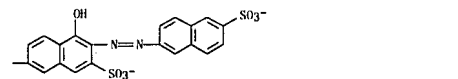


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L4 ANSWER 67 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)  
 PAGE 1-A



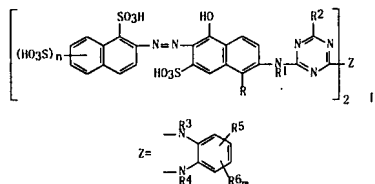
PAGE 1-B



L4 ANSWER 68 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN  
 ACCESSION NUMBER: 1982:493947 CAPLUS  
 DOCUMENT NUMBER: 97:93947  
 TITLE: Cellulose-reactive dyes and methods for coloring  
 cellulose textile materials  
 INVENTOR(S): Andrew, Herbert Francis; Barlow, Clive Hugh  
 PATENT ASSIGNEE(S): Imperial Chemical Industries PLC, UK  
 SOURCE: Braz. Pedido PI, 25 pp.  
 CODEN: BFXDXD  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Portuguese  
 FAMILY ACC. NUM. COUNT: 2  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
RR 8103722	A	19820302	RR 1981-3722	19810611
PRIORITY APPL. INFO.:			GB 1980-19871	A 19800618
			GB 1981-10321	A 19810402

GRAPHIC IMAGE:



ABSTRACT:  
 Disazo fiber-reactive dyes I (R = H, Cl, SO<sub>3</sub>H; R<sub>1</sub> = H, Cl-4 alkyl; R<sub>2</sub> = Cl, Br, F, SO<sub>3</sub>H, quaternary ammonium group; R<sub>3</sub>, R<sub>4</sub> = H, Me, Et; R<sub>5</sub> = H, SO<sub>3</sub>H, CO<sub>2</sub>H; R<sub>6</sub> = H, Cl, Me, OMe; n = 1, 2) are prepared and used to dye cellulosic textiles in fast intense shades. Thus, trisodium 2-[[6-[[4,6-dichloro-s-triazin-2-yl]amino]-1-hydroxy-3-sulfo-2-naphthyl]azo]-1,5-naphthalenedisulfonate [81286-05-7] was condensed with 3,4-toluenediamine [496-72-0] to give I [R = R<sub>1</sub> = R<sub>3</sub> = R<sub>4</sub> = R<sub>5</sub> = H, R<sub>2</sub> = Cl, R<sub>6</sub> = 4-Me, n = 1 (5-position)] [81286-12-6], fast reddish orange on cellulosic textiles. Four addnl. I were prepared by related methods.

IT 82782-80-7  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (dye, for cellulosic textiles, preparation of)

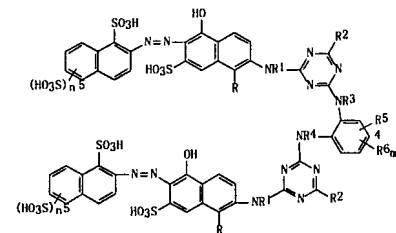
RN 82782-80-7 CAPLUS

CN Pyridinium, 1,1'-[[4-methyl-1,2-phenylene]bis[imino[6-[[6-[[1,5-disulfo-2-naphthalenyl]azo]-5-hydroxy-7-sulfo-2-naphthalenyl]amino]-1,3,5-triazine-4,2-diyl]]]bis[3-carboxy-, bis(inner salt), hexasodium salt (9C1) (CA INDEX NAME)

L4 ANSWER 69 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN  
 ACCESSION NUMBER: 1982:164135 CAPLUS  
 DOCUMENT NUMBER: 96:164135  
 TITLE: Reactive dyes  
 INVENTOR(S): Andrew, Herbert Francis; Barlow, Clive Hugh  
 PATENT ASSIGNEE(S): Imperial Chemical Industries Ltd., UK  
 SOURCE: Eur. Pat. Appl., 19 pp.  
 CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 2  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 42204	A2	19811223	EP 1981-301434	19810402
R: BE, CH, DE, FR, GB, IT, NL				
AU 8169688	A	19811224	AU 1981-69688	19810421
ZA 8102611	A	19820428	ZA 1981-2611	19810421
JP 57030764	A	19820219	JP 1981-91655	19810616
CS 222247	B2	19830527	CS 1981-4494	19810616
ES 503142	A1	19820416	ES 1981-503142	19810617
PRIORITY APPL. INFO.:			GB 1980-19871	A 19800618

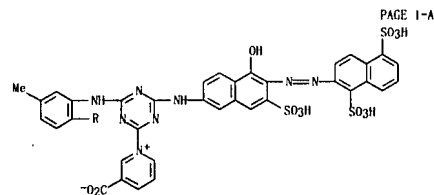
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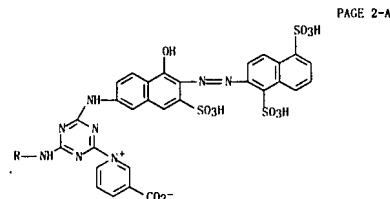
ABSTRACT:  
 Cellulose reactive dyes, which in the free acid form have general structure I, are prepared where R = H, Cl, or SO<sub>3</sub>H; R<sub>1</sub> = H, Cl-4 alkyl; R<sub>2</sub> = Cl, Br, F, SO<sub>3</sub>H, or a quaternary ammonium group; R<sub>3</sub>, R<sub>4</sub> = (independently) H, Me, Et; R<sub>5</sub> = H, SO<sub>3</sub>H, or CO<sub>2</sub>H; R<sub>6</sub> = H, Cl, Me, or OMe; n = 1 or 2; and n = 1 or 2. Thus, tri-Na 2-[[2,4-dichloro-s-triazin-6-ylamino]-6-(1,5-disulfonaphth-2-ylazo)-5-naphthol-7-sulfonate [81286-05-7] in water was treated with 3,4-diaminotoluene [496-72-0] and stirred 1 h at 40° to give I [R = R<sub>1</sub> = R<sub>3</sub> = R<sub>4</sub> = R<sub>5</sub> = H, R<sub>2</sub> = Cl, R<sub>6</sub> = Me, n = 1 (at position 4), n = 1 (at position 5), Na salt] [81286-12-6] which dyed cellulosic textiles in strong reddish orange shades that were fast to light and washing.

IT 81286-14-8  
 RL: USES (Uses)  
 (reactive dye, for cellulose fibers, manufacture of)  
 RN 81286-14-8 CAPLUS

L4 ANSWER 68 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



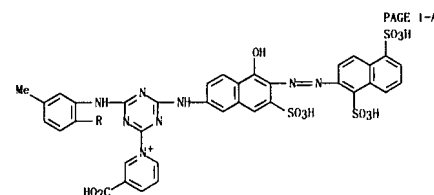
PAGE 1-A



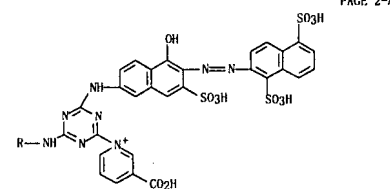
PAGE 2-A

● 6 Na

L4 ANSWER 69 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)  
 CN Pyridinium, 1,1'-[[4-methyl-1,2-phenylene]bis[imino[6-[[6-[[1,5-disulfo-2-naphthalenyl]azo]-5-hydroxy-7-sulfo-2-naphthalenyl]amino]-1,3,5-triazine-4,2-diyl]]]bis[3-carboxy-, dichloride, octasodium salt (9C1) (CA INDEX NAME)



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PAGE 2-A

● 2 Cl<sup>-</sup>

● 8 Na

PAGE 3-A

L4 ANSWER 70 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1979:475691 CAPLUS  
 DOCUMENT NUMBER: 91:75691  
 TITLE: Water-soluble, fiber-reactive dyes for dyeing and printing textiles  
 INVENTOR(S): Hoyer, Ernst; Meininger, Fritz; Noll, Walter; Fass, Rudolf  
 PATENT ASSIGNEE(S): Hoechst A.-G., Fed. Rep. Ger.  
 SOURCE: Ger. Offen., 46 pp.  
 CODEN: GWXXBX  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2748966	A1	19790503	DE 1977-2748966	19771102
DE 2748966	B2	19791213		
DE 2748966	C3	19800821		
IN 150365	A1	19820918	IN 1978-CA1161	19781026
CH 639120	A5	19831031	CH 1978-11224	19781031
BR 7807228	A	19790612	BR 1978-7228	19781101
JP 54081335	A	19790628	JP 1978-133848	19781101
JP 62039179	B	19870821		
GB 2007698	A	19790523	GB 1978-42968	19781102
GB 2007698	B	19820407		
FR 2407960	A1	19790601	FR 1978-31030	19781102
FR 2407960	B1	19850823		
CA 1106839	A1	19810811	CA 1978-315742	19781102
BE 871728	A1	19790503	BE 1978-191501	19781103
			DE 1977-2748966	A 19771102

PRIORITY APPLN. INFO.:

GRAPHIC IMAGE:

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

## ABSTRACT:

Fiber-reactive azo dyes of general structure I and their metal complexes (Cu, Cr, Co) are prepared for application on cellulose or polyamide fibers. In structure I, Z represents a benzene or naphthalene nucleus; Z1 and Z2 are the same or different divalent groups selected from Z3 (n = 0 or 1) and Z4; R = H, halogen, or an alkyl, alkoxy, HO, carboxy, or sulfo group ortho to the azo group; R1 = H, halogen, alkyl, alkoxy, NO2, or sulfo; R2 = Cl, F, Br, or a sulfo, amino, thioether, or ether group; and R3 =  $\beta$ -sulfoethyl, vinyl, C(CH2CH2), or  $\beta$ -thiosulfatoethyl. For example, diazotization of 4-H2NCH6HSO2CH2CH2OSO3H [2494-89-5] and coupling with the product [23686-05-7] obtained by successive reaction of 1 mol cyanuric chloride [108-77-0] with 1 mol H acid [90-20-0] and 1 mol I acid [87-02-5] gave II [70817-75-3], a fast red dye for cotton.

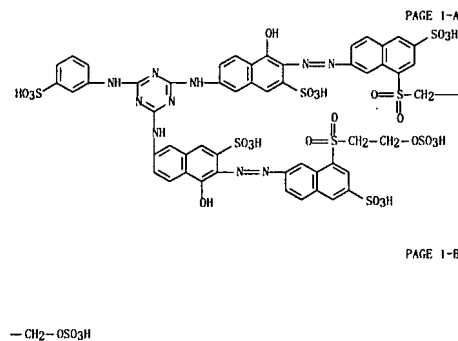
IT 70866-95-4P

RI: PREP (Preparation)  
 (manufacture of, as reactive dye for cellulose fibers)

RN 70866-95-4 CAPLUS

CN 2-Naphthalenesulfonic acid, 7,7'-[6-[(3-sulphophenyl)amino]-1,3,5-triazine-2,4-diyl]diimino]bis[4-hydroxy-3-[[6-sulfo-8-[[2-(sulfoxy)ethyl]sulfonyl]-2-naphthalenyl]azo]- (9CI) (CA INDEX NAME)

L4 ANSWER 70 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



L4 ANSWER 71 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN

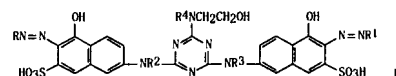
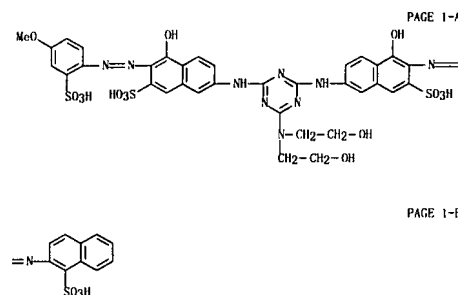
ACCESSION NUMBER: 1979:458695 CAPLUS  
 DOCUMENT NUMBER: 91:58695  
 TITLE: Substantive disazo dyes  
 INVENTOR(S): Seltz, Karl  
 PATENT ASSIGNEE(S): Ciba-Geigy A.-G., Swiss.  
 SOURCE: Ger. Offen., 20 pp.  
 CODEN: GWXXBX  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2847307	A1	19790510	DE 1978-2847307	19781031
FR 2407968	A1	19790601	FR 1978-30789	19781030
JP 54072228	A	19790609	JP 1978-132720	19781030
BE 871681	A1	19790430	BE 1978-191460	19781031
FI 7803305	A	19790504	FI 1978-3305	19781031
SE 7811373	A	19790504	SE 1978-11373	19781102
GB 2007250	A	19790516	GB 1978-43034	19781102
			LU 1977-78438	A 19771103

PRIORITY APPLN. INFO.:

GRAPHIC IMAGE:

L4 ANSWER 71 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



## ABSTRACT:

Substantive red dyes (I) for cotton and especially paper are prepared, where R and R1 represent the residue of benzene, naphthalene, or heterocyclic diazo components, R2 and R3 are H or Me, and R4 is H or HOCH2CH2. Thus, reaction of J acid [87-02-5] with cyanuric chloride [108-77-0], coupling with diazotized 2,4-HO3S(MeO)C6H3NH2 [13244-33-2], and treatment of the product with diethanolamine [111-42-2] gave I [R = R1 = 2,4-HO3S(MeO)C6H3, R2 = R3 = H, R4 = HOCH2CH2] [70763-98-3]. Other I were similarly prepared.

IT 70763-97-2P

RI: PREP (Preparation)  
 (manufacture of, as dye for cotton and paper)

RN 70763-97-2 CAPLUS

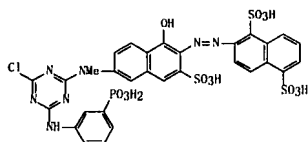
CN 1-Naphthalenesulfonic acid, 2-[[6-[[4-bis(2-hydroxyethyl)amino]-6-[[5-hydroxy-6-[[4-methoxy-2-sulphophenyl]azo]-7-sulfo-2-naphthalenyl]amino]-1,3,5-triazin-2-yl]amino]-1-hydroxy-3-sulfo-2-naphthalenyl]azo]- (9CI) (CA INDEX NAME)



L4 ANSWER 72 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1977-56730 CAPLUS  
DOCUMENT NUMBER: 86-56730  
TITLE: Dyes for cellulose-containing textiles  
INVENTOR(S): Plant, David W.; Williams, David John  
PATENT ASSIGNEE(S): Imperial Chemical Industries Ltd., UK  
SOURCE: Ger. Offen., 77 pp.  
CODEN: GWXXBX  
DOCUMENT TYPE: Patent  
LANGUAGE: German  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

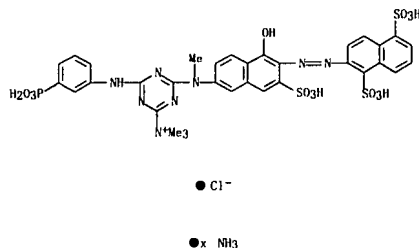
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2616683	A1	19761028	DE 1976-2616683	19760415
GB 1502684	A	19780301	GB 1975-15397	19750415
ZA 7601908	A	19770330	ZA 1976-1908	19760330
AU 497288	B2	19781207	AU 1976-12651	19760405
BR 7602255	A	19761012	BR 1976-2255	19760413
CS 189760	B2	19790430	CS 1976-2441	19760413
NL 7603952	A	19761019	NL 1976-3952	19760414
FR 2307852	A1	19761112	FR 1976-11038	19760414
FR 2307852	B1	19801205		
DD 125539	A5	19770427	DD 1976-192367	19760414
ES 447017	A1	19790516	ES 1976-447017	19760414
BE 840810	A1	19761015	BE 1976-166215	19760415
CH 625267	A5	19810915	CH 1976-4894	19760415
ES 451996	A1	19771001	ES 1976-451996	19760930
ES 451998	A1	19771001	ES 1976-451998	19760930
ES 451997	A1	19780101	ES 1976-451997	19760930
PRIORITY APPLN. INFO.:			GB 1975-15397	A 19750415
			GB 1976-672	A 19760108
GRAPHIC IMAGE:			GB 1976-2171	A 19760120



# ABSTRACT:

Fast dyes for cellulosic fibers are prepared by bonding amino-substituted azo, anthraquinone, stilbene, or triphenyldioxazine dyes through an s-triazine bridge to a group of general structure N(R)ZPO3H2, where R = H or alkyl and Z = alkylene or arylene; the triazine bridge also is substituted by a halo, amino, alkoxy, OH, or quaternary ammonium group. These dyes are applied (alone in the presence of disperse dyes) from acidic aqueous media, followed by baking in the presence of cyanamide or dicyandiamide. A typical dye, the orange ammonium salt [61433-42-9] of I, was prepared by successive reaction of cyanuric chloride [108-77-0] with 1,3,6,2-HO(HO3S) (MeNH)ClOH4N:NC1OH5(SO3H)-2,1,5 [61433-43-0] and m-H2NC6H4PO3H2 [5427-30-5] followed by treatment with NH4Cl.

L4 ANSWER 72 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

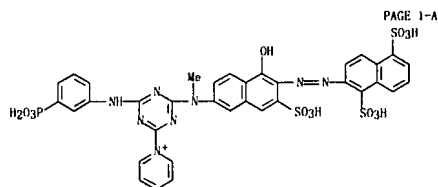


● Cl<sup>-</sup>

● x NH<sub>3</sub>

L4 ANSWER 72 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

IT 61433-13-4P 61433-14-5P  
RL: IMF (Industrial manufacture): PREP (Preparation) -  
(preparation of)  
RN 61433-13-4 CAPLUS  
CN Pyridinium, 1-[4-[[6-[[1,5-disulfo-2-naphthalenyl]azo]-5-hydroxy-7-sulfo-2-naphthalenyl]methylamino]-6-[[3-phosphonophenyl]amino]-1,3,5-triazin-2-yl]-, chloride, ammonium salt (9C1) (CA INDEX NAME)



● Cl<sup>-</sup>

● x NH<sub>3</sub>

RN 61433-14-5 CAPLUS

CN 1,3,5-Triazin-2-aminium, 4-[[6-[[1,5-disulfo-2-naphthalenyl]azo]-5-hydroxy-7-sulfo-2-naphthalenyl]methylamino]-N,N,N-trimethyl-6-[[3-phosphonophenyl]amino]-, chloride, ammonium salt (9C1) (CA INDEX NAME)

L4 ANSWER 73 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1965:481146 CAPLUS  
DOCUMENT NUMBER: 63:81146  
ORIGINAL REFERENCE NO.: 63:15018b, 15019a-b  
TITLE: Metallized azo dyes  
PATENT ASSIGNEE(S): CIBA Ltd.  
SOURCE: 8 pp.  
DOCUMENT TYPE: Patent  
LANGUAGE: Unavailable  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
NL 6409824		19650301	NL 1964-9824	19640825
FR 1411276			FR	
			CH	19630826

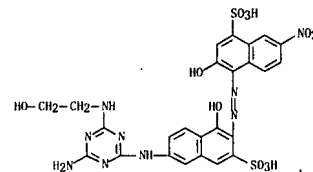
PRIORITY APPLN. INFO.:

GRAPHIC IMAGE: For diagram(s), see printed CA Issue.

# ABSTRACT:

The 1:2 Cr complex of I (X = N(CH<sub>2</sub>CH<sub>2</sub>OH)), dyeing cotton grayish green shades, was prepared by adding ethanolamine 12 to a solution of the 1:2 Cr complex of I (X = Cl) 83.5 in H<sub>2</sub>O 500 parts, followed by heating the mixture 3 hrs. at 90° and evaporating to dryness. The corresponding Co complex dyes cotton blackish gray shades. Similarly, the 1:2 Cr and Co complexes of II, dyeing cotton greenish gray and grayish violet shades, resp., were prepared. The latter compds. were also prepared by condensing the 1:2 metal complex of the appropriate amino azo component with 2-chloro-4-amino-6-(p-hydroxyethylamino)-s-triazine.

IT 859451-81-3, 1-Naphthalenesulfonic acid, 4-[[6-[[4-amino-6-[(2-hydroxyethyl)amino]-s-triazin-2-yl]amino]-1-hydroxy-3-sulfo-2-naphthyl]azo]-3-hydroxy-7-nitro- (chromium and Co complexes)  
RN 859451-81-3 CAPLUS  
CN 1-Naphthalenesulfonic acid, 4-[[6-[[4-amino-6-[(2-hydroxyethyl)amino]-s-triazin-2-yl]amino]-1-hydroxy-3-sulfo-2-naphthyl]azo]-3-hydroxy-7-nitro- (7C1) (CA INDEX NAME)



L4 ANSWER 74 OF 76 CAPLUS COPYRIGHT 2007 ACS ON STN  
ACCESSION NUMBER: 1965:22900 CAPLUS  
DOCUMENT NUMBER: 62:22900  
ORIGINAL REFERENCE NO.: 62:4142d-e  
TITLE: Ciba drugs containing chlorotriazinylamino groups  
PATENT ASSIGNEE(S): Ciba Ltd.  
SOURCE: 6 pp., Addn. to Brit. 900,391 (see Ger. 1,110,788, CA  
55, 25264e)  
DOCUMENT TYPE: Patent  
LANGUAGE: Unavailable  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

L4 ANSWER 74 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)  
PAGE 2-A

●3 Na

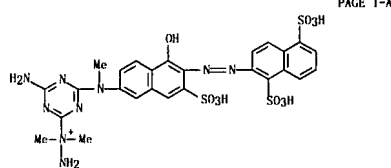
<u>PATENT NO.</u>	<u>KIND</u>	<u>DATE</u>	<u>APPLICATION NO.</u>	<u>DATE</u>
GB 973114		19641021	GB 1961-29332	19610814
CH 393591			CH	
US 3165506		19650112	US 1961-130006	19610808
PRIORITY APPL. INFO. :			CH	19600812

PRIORITY APPLN. INFO. :

ABSTRACT: H2O-soluble diazo dyes containing a chlorotriazinyl group were prepared by condensing a suitable diazo dye with cyanuric chloride (1) in 18.6 g in ice 300 and 300 ml H<sub>2</sub>O. 200 treated at 25°C and pH 4.6 with 2, 5, 7, 4-(H3O3C)3C10H4N2 (11) and 2,5,6-trisubstituted H2N12 (1) - 6-(H3O3C)10H4N2 (1V) 74. In H2O 500 parts during 2 hrs. yielded a dye which dyes cotton from an alkaline bath at 25-35° yellow-brown tints of good wash- and lightfastness. Similarly, other dyes were treated with 1 and shade given: 11 - IV - IV, red-brown; 1 - 5, 2-MeO(MeO)6H4N12 - IV, red-brown; 11 - 1, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40, 42, 44, 46, 48, 50, 52, 54, 56, 58, 60, 62, 64, 66, 68, 70, 72, 74, 76, 78, 80, 82, 84, 86, 88, 90, 92, 94, 96, 98, 100, 102, 104, 106, 108, 110, 112, 114, 116, 118, 120, 122, 124, 126, 128, 130, 132, 134, 136, 138, 140, 142, 144, 146, 148, 150, 152, 154, 156, 158, 160, 162, 164, 166, 168, 170, 172, 174, 176, 178, 180, 182, 184, 186, 188, 190, 192, 194, 196, 198, 200, 202, 204, 206, 208, 210, 212, 214, 216, 218, 220, 222, 224, 226, 228, 230, 232, 234, 236, 238, 240, 242, 244, 246, 248, 250, 252, 254, 256, 258, 260, 262, 264, 266, 268, 270, 272, 274, 276, 278, 280, 282, 284, 286, 288, 290, 292, 294, 296, 298, 300, 302, 304, 306, 308, 310, 312, 314, 316, 318, 320, 322, 324, 326, 328, 330, 332, 334, 336, 338, 340, 342, 344, 346, 348, 350, 352, 354, 356, 358, 360, 362, 364, 366, 368, 370, 372, 374, 376, 378, 380, 382, 384, 386, 388, 390, 392, 394, 396, 398, 400, 402, 404, 406, 408, 410, 412, 414, 416, 418, 420, 422, 424, 426, 428, 430, 432, 434, 436, 438, 440, 442, 444, 446, 448, 450, 452, 454, 456, 458, 460, 462, 464, 466, 468, 470, 472, 474, 476, 478, 480, 482, 484, 486, 488, 490, 492, 494, 496, 498, 500, 502, 504, 506, 508, 510, 512, 514, 516, 518, 520, 522, 524, 526, 528, 530, 532, 534, 536, 538, 540, 542, 544, 546, 548, 550, 552, 554, 556, 558, 560, 562, 564, 566, 568, 570, 572, 574, 576, 578, 580, 582, 584, 586, 588, 590, 592, 594, 596, 598, 600, 602, 604, 606, 608, 610, 612, 614, 616, 618, 620, 622, 624, 626, 628, 630, 632, 634, 636, 638, 640, 642, 644, 646, 648, 650, 652, 654, 656, 658, 660, 662, 664, 666, 668, 670, 672, 674, 676, 678, 680, 682, 684, 686, 688, 690, 692, 694, 696, 698, 700, 702, 704, 706, 708, 710, 712, 714, 716, 718, 720, 722, 724, 726, 728, 730, 732, 734, 736, 738, 740, 742, 744, 746, 748, 750, 752, 754, 756, 758, 760, 762, 764, 766, 768, 770, 772, 774, 776, 778, 780, 782, 784, 786, 788, 790, 792, 794, 796, 798, 800, 802, 804, 806, 808, 810, 812, 814, 816, 818, 820, 822, 824, 826, 828, 830, 832, 834, 836, 838, 840, 842, 844, 846, 848, 850, 852, 854, 856, 858, 860, 862, 864, 866, 868, 870, 872, 874, 876, 878, 880, 882, 884, 886, 888, 890, 892, 894, 896, 898, 900, 902, 904, 906, 908, 910, 912, 914, 916, 918, 920, 922, 924, 926, 928, 930, 932, 934, 936, 938, 940, 942, 944, 946, 948, 950, 952, 954, 956, 958, 960, 962, 964, 966, 968, 970, 972, 974, 976, 978, 980, 982, 984, 986, 988, 990, 992, 994, 996, 998, 1000, 1002, 1004, 1006, 1008, 1010, 1012, 1014, 1016, 1018, 1020, 1022, 1024, 1026, 1028, 1030, 1032, 1034, 1036, 1038, 1040, 1042, 1044, 1046, 1048, 1050, 1052, 1054, 1056, 1058, 1060, 1062, 1064, 1066, 1068, 1070, 1072, 1074, 1076, 1078, 1080, 1082, 1084, 1086, 1088, 1090, 1092, 1094, 1096, 1098, 1100, 1102, 1104, 1106, 1108, 1110, 1112, 1114, 1116, 1118, 1120, 1122, 1124, 1126, 1128, 1130, 1132, 1134, 1136, 1138, 1140, 1142, 1144, 1146, 1148, 1150, 1152, 1154, 1156, 1158, 1160, 1162, 1164, 1166, 1168, 1170, 1172, 1174, 1176, 1178, 1180, 1182, 1184, 1186, 1188, 1190, 1192, 1194, 1196, 1198, 1200, 1202, 1204, 1206, 1208, 1210, 1212, 1214, 1216, 1218, 1220, 1222, 1224, 1226, 1228, 1230, 1232, 1234, 1236, 1238, 1240, 1242, 1244, 1246, 1248, 1250, 1252, 1254, 1256, 1258, 1260, 1262, 1264, 1266, 1268, 1270, 1272, 1274, 1276, 1278, 1280, 1282, 1284, 1286, 1288, 1290, 1292, 1294, 1296, 1298, 1300, 1302, 1304, 1306, 1308, 1310, 1312, 1314, 1316, 1318, 1320, 1322, 1324, 1326, 1328, 1330, 1332, 1334, 1336, 1338, 1340, 1342, 1344, 1346, 1348, 1350, 1352, 1354, 1356, 1358, 1360, 1362, 1364, 1366, 1368, 1370, 1372, 1374, 1376, 1378, 1380, 1382, 1384, 1386, 1388, 1390, 1392, 1394, 1396, 1398, 1400, 1402, 1404, 1406, 1408, 1410, 1412, 1414, 1416, 1418, 1420, 1422, 1424, 1426, 1428, 1430, 1432, 1434, 1436, 1438, 1440, 1442, 1444, 1446, 1448, 1450, 1452, 1454, 1456, 1458, 1460, 14

IT 3445-95-2P. Hydrazinium, 1-[4-amino-6-[[6-[(1,5-disulfo-2-naphthyl)azo]-5-hydroxy-7-sulfo-2-naphthyl]methylamino]-s-triazin-2-yl]-1,1-dimethyl-, chloride, trisodium salt  
 RL: PREP (Preparation)

RN 3445-95-2 CAPLUS  
 CN Hydrazinium, 1-[4-amino-6-[[6-[(1,5-disulfo-2-naphthyl)azo]-5-hydroxy-7-sulfo-2-naphthyl)methylamino]-s-triazin-2-yl]-1,1-dimethyl-, chloride, trisodium salt (8CI) (CA INDEX NAME)



● Cl-

L4 ANSWER 75 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN  
ACCESSION NUMBER: 1950:39509 CAPLUS  
DOCUMENT NUMBER: 44:39509  
ORIGINAL REFERENCE NO.: 44:7551h-1, 7552a  
TITLE: Trisazo dyes  
INVENTOR(S): Kaiser, Otto  
PATENT ASSIGNEE(S): C I B A Ltd.  
DOCUMENT TYPE: Patent  
LANGUAGE: Unavailable  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2493975		19500110	US 1946-673171	19460529

US 2  
ABSTRACT:

**ABSTRACT:** The synthesis and structure of triazo dye characterized by one salicylic acid radical is described. Care must be taken to select the various starting materials so that the final products contain sufficient sulfo groups or carbonyl groups to possess adequate solubility and not so many sulfo groups as to impair the dyeing capacity and properties of fastness of the final dyes. Cellulosic materials are used as the substrate and the dyeing results are fast to washing. 5-Aminosalicylic acid diazotized and coupled with 1-naphthylamine-7-sulfonic acid, rediazotized and coupled with the ternary triazine condensation product from cyanuric chloride 1 mol., 2-amino-5-hydroxy-7-naphthalenesulfonic acid, 3-aminobenzenesulfonic acid, and 5-amino-2-hydroxy-7-sulfonamido-1-naphthylamine (4-amino-1-naphthylamine)-1-hydroxy-3-sulfo-2-naphthylazo-1-naphthylazo-6-sulfo-1-naphthylazo salicylic acid. Also claimed was 5-[7-(4-[6-(4-methylamino)-6-sulfoanilino-2-(3-triazinylamino)-1-hydroxy-3-sulfo-2-naphthylazo]-1-naphthylazo)-5-sulfo-2-naphthylazo]salicylic acid and 5-[4-(6-(4-methylamino)-6-sulfoanilino-2-(3-triazinylamino)-1-hydroxy-3-sulfo-2-naphthylazo)-1-naphthylazo)-6-sulfo-1-naphthylazo]salicylic acid. CF. C.A. 42, 4359b.

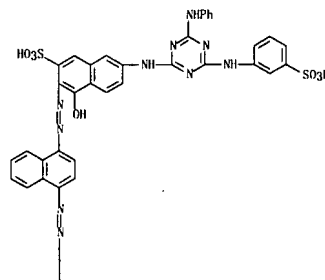
IT 860507-75-IP, Salicylic acid, 5-[4-[4-[6-(4-anilino-6-m-sulfoanilino-s-triazin-2-ylamino)-1-hydroxy-3-sulfo-2-naphthylazo]-1-naphthylazo]-6-sulfo-2-naphthylazo]-1-naphthylazo]-44-OP, Salicylic acid, 5-[7-[4-[1-hydroxy-6-(4-N-methylanilino-6-m-sulfoanilino-s-triazin-2-ylamino)-3-sulfo-2-naphthylazo]-1-naphthylazo]-5-sulfo-2-naphthylazo]-RL: PREP (Preparation)  
(preparation of)

RN 860507-75-1 CAPLUS

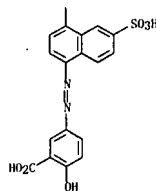
Salicylic acid, 5-[4-[4-[6-(4-anilino-6-*n*-sulfoanilino-*s*-triazin-2-ylamino)-1-hydroxy-3-sulfo-2-naphthylazo]-1-naphthylazo]-6-sulfo-1-naphthylazo]-(5CI) (CA INDEX NAME)

L4 ANSWER 75 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

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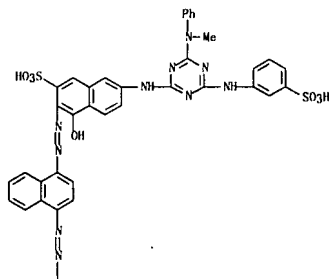
PAGE 2-A



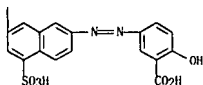
RN 860509-44-0 CAPLUS  
CN Salicylic acid, 5-[7-[4-[1-hydroxy-6-(4-N-methylanilino-6-n-sulfoanilino-  
triazin-2-ylamino)-3-sulfo-2-naphthylazo]-1-naphthylazo]-5-sulfo-2-  
naphthylazo]- (5C1) (CA INDEX NAME)

L4 ANSWER 75 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

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L4 ANSWER 76 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 194730211 CAPLUS  
 DOCUMENT NUMBER: 41:30211  
 ORIGINAL REFERENCE NO.: 41:6054d-i, 6055a-b  
 TITLE: Azo dyes from 2, 6-dihalo-4-nitroaniline  
 INVENTOR(S): Felix, Friedrich; von Capeller, Rudolf  
 PATENT ASSIGNEE(S): Soc. pour l'ind. chim. a Bale  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Unavailable  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2421553		19470603	US 1945-579902	19450226

GRAPHIC IMAGE: For diagram(s), see printed CA Issue.

## ABSTRACT:

Dyes of the general formula: where hal stands for Cl or Br, the X's and Y's for 3 H's and 1 SO<sub>3</sub>H group, and R for a sulfonated amino or hydroxyaminonaphthalene residue, are prepared by coupling the corresponding 2,6-dihalo-4-nitroaniline with an aminonaphthalenesulfonic acid, diazotizing the product, and coupling it with an aminonaphthalenesulfonic acid, and finally diazotizing the disazo dye and coupling it with an aminonaphthalenesulfonic acid. Thus, 1-amino-2,6-dichloro-4-nitrobenzene 20.7 was diazotized, poured into ice, and mixed with MgO 30, and 1-amino-7-naphthalenesulfonic acid (I) 22.3 parts added. The coupling of the dye was accelerated by the addition of NaOAc. The precipitated dye was filtered, washed with aqueous Na<sub>2</sub>CO<sub>3</sub>, filtered again, and then diazotized and coupled with I. The disazo dye (II) so obtained was diazotized again and coupled with 2-amino-5-hydroxy-7-naphthalenesulfonic acid (III), yielding a dye of the following structure: If, instead of III, II is coupled with the ternary condensation product of cyanuric chloride with III, 1-amino-3-benzenesulfonic acid, and PhNH<sub>2</sub>, a dye of the following structure is obtained: Conditions for dyeing cotton and viscose rayon with these dyes are given.

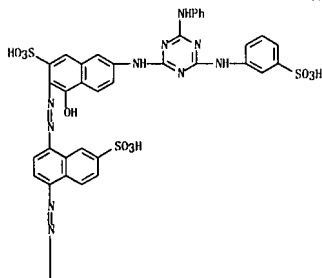
IT 856094-44-5P, 1-Naphthol-3-sulfonic acid, 6-(6-anilino-4- $\pi$ -sulfoanilino-s-triazin-2-ylamino)-2-[4-(2,6-dichloro-4-nitrophenylazo)-7-sulfo-1-naphthylazo]-7-sulfo-1-naphthylazo]-  
 RL: PREP (Preparation)  
 (preparation of)

RN 856094-44-5 CAPLUS

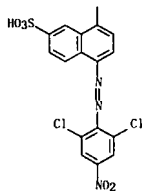
CN 1-Naphthol-3-sulfonic acid, 6-(6-anilino-4- $\pi$ -sulfoanilino-s-triazin-2-ylamino)-2-[4-(2,6-dichloro-4-nitrophenylazo)-7-sulfo-1-naphthylazo]-7-sulfo-1-naphthylazo]- (5C1) (CA INDEX NAME)

L4 ANSWER 76 OF 76 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

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L5	11	SEA	FILE=CAPLUS	ABB=ON	PLU=ON	"LENNARTZ MICHAEL"/AU
L6	3	SEA	FILE=CAPLUS	ABB=ON	PLU=ON	"WEISS SANDRA"/AU
L7	11	SEA	FILE=CAPLUS	ABB=ON	PLU=ON	L5 OR L6
L8	4	SEA	FILE=CAPLUS	ABB=ON	PLU=ON	L7 AND (AZO OR MONOAZO)

=> d 1-4 bib abs

L8 ANSWER 1 OF 4 CAPLUS COPYRIGHT 2007 ACS ON STN  
 AN 2006:382844 CAPLUS  
 DN 144:414246  
 TI Production of 4,4'-diazobenzanilide derivative dyestuffs and their uses  
 IN Lennartz, Michael; Lautenbach, Holger  
 PA Ciba Specialty Chemicals Holding Inc., Switz.  
 SO PCT Int. Appl., 89 pp.  
 COOEN: PIXXD2  
 DT Patent  
 LA English  
 FAN. CNT 1

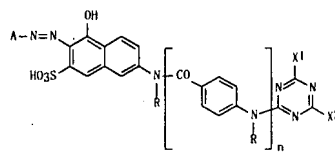
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2006042801	A1	20060427	WO 2005-EP55118	20051010
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, NZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
AU 2005296819	A1	20060427	AU 2005-296819	20051010
PRA1 EP 2004-105117	A	20041018		
WO 2005-EP55118	W	20051010		
OS CASREACT 144:414246; MARPAT 144:414246				
GI				

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB The present invention provides 4,4'-diazobenzanilide derivs., a process for their preparation, their use as dyes, dyed paper. Formulations comprising them and also precursors thereof and their processes of preparation. Thus, thus 4-amino-4'-azobenzanilide derivative (I) was reacted with barbituric acid to give a 4,4'-diazobenzanilide derivative dye (II) with good exhaustion and lightfastness when dyeing sulfite fibers.  
 RE. CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 2 OF 4 CAPLUS COPYRIGHT 2007 ACS ON STN  
 AN 2004:120915 CAPLUS  
 DN 140:165440  
 TI Anionic monoazo dyes, their production and their use  
 IN Lennartz, Michael; Weiss, Sandra  
 PA Ciba Specialty Chemicals Holding Inc., Switz.  
 SO PCT Int. Appl., 34 pp.  
 COOEN: PIXXD2  
 DT Patent  
 LA English  
 FAN. CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2004013233	A1	20040212	WO 2003-EP7770	20030717
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, GR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
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CA 2493627	A1	20040212	CA 2003-2493627	20030717
AU 2003246711	A1	20040223	AU 2003-246711	20030717
EP 1525267	A1	20050427	EP 2003-766203	20030717
EP 1525267	B1	20070321		
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK			
BR 2003012902	A	20050614	BR 2003-12902	20030717
CN 1671799	A	20050921	CN 2003-817438	20030717
JP 200533914	T	20051110	JP 2004-525232	20030717
AT 357484	T	20070415	AT 2003-766203	20030717
US 2005256305	A1	20051117	US 2005-520964	20050111
IN 2005CN00251	A	20070330	IN 2005-CN251	20050223
PRA1 EP 2002-405652	A	20020726		
WO 2003-EP7770	W	20030717		
OS CASREACT 140:165440; MARPAT 140:165440				
GI				



AB Yellowish-red anionic monoazo dyes (I; A = naphthyl containing 1-2 sulfo and/or carboxy groups; R = H, Cl-4-alkyl; X1, X2 = substituted amino; n = 0-1) are disclosed, which show high degrees of exhaustion and color strength and fastness when used to dye paper and which exhibit

L8 ANSWER 2 OF 4 CAPLUS COPYRIGHT 2007 ACS ON STN (Continued)  
 AN 2003:991586 CAPLUS  
 DN 140:28628  
 TI Yellow anionic disazo dyes, their production and their use on paper  
 IN Lennartz, Michael; Kaser, Doelf; Weiss, Sandra  
 PA Ciba Specialty Chemicals Holding, Inc., Switz.  
 SO PCT Int. Appl., 87 pp.  
 COOEN: PIXXD2  
 DT Patent  
 LA English  
 FAN. CNT 1

L8 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2007 ACS ON STN  
 AN 2003:991586 CAPLUS  
 DN 140:28628  
 TI Yellow anionic disazo dyes, their production and their use on paper  
 IN Lennartz, Michael; Kaser, Doelf; Weiss, Sandra  
 PA Ciba Specialty Chemicals Holding, Inc., Switz.  
 SO PCT Int. Appl., 87 pp.  
 COOEN: PIXXD2  
 DT Patent  
 LA English  
 FAN. CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2003104333	A1	20031218	WO 2003-EP5561	20030527
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RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
CA 2488406	A1	20031218	CA 2003-2488406	20030527
AU 2003238408	A1	20031222	AU 2003-238408	20030527
BR 2003011610	A1	20050222	BR 2003-11610	20030527
EP 1509574	A1	20050302	EP 2003-732477	20030527
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK			
US 2005172420	A1	20050811	US 2003-517410	20030527
CN 1659239	A	20050824	CN 2003-813113	20030527
JP 200528517	T	20050922	JP 2004-511397	20030527
ZA 2004009272	A	20051118	ZA 2004-9272	20041118
IN 2004CN03074	A	20060217	IN 2004-CN3074	20041231
PRA1 EP 2002-405456	A	20020606		
WO 2003-EP5561	W	20030527		
OS MARPAT 140:28628				

AB The present invention relates to novel yellow anionic dyes based on diaminobenzanilides, a process for their preparation, certain novel intermediates necessary for their preparation, and the use of these dyes for dyeing natural or synthetic materials, in particular, paper. The dyes show good degrees of exhaustion on paper and high color strength and are suitable for jet-printing inks and for mass dyeing of paper. In an example, 4'-amino-4-nitrobenzanilide-3-sulfonic acid was prepared and the nitro group was reduced to an amino group to give a tetrazo component. Coupling (1:2) with 5-amino-3-methyl-1-(3-sulfohenyl)pyrazole gave a yellow-brown disazo dye.

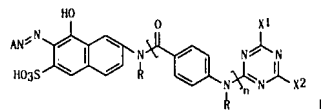
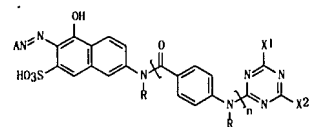
RE. CNT 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 4 OF 4 CAPLUS COPYRIGHT 2007 ACS on STN  
 AN 2003:97478 CAPLUS  
 DN 138:138767  
 TI Azo dyes incorporating anionic and cationic groups, their  
 production and their use on paper  
 IN Lennartz, Michael; Kaeser, Doelf; Weiss, Sandra  
 PA Ciba Specialty Chemicals Holding Inc., Switz.  
 SO PCT Int. Appl., 56 pp.  
 COOEN: PIXXD2  
 DT Patent  
 LA English

FAN, CNT 1  
 PATENT NO. KIND DATE APPLICATION NO. DATE

P1	WO 2003010239	A1	20030206	WO 2002-EP7732	20020711
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW			
	RW:	GH, GM, KE, LS, MW, MZ, SD, SI, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
	CA 2452522	A1	20030206	CA 2002-2452522	20020711
	AU 200231248	A1	20030217	AU 2002-331248	20020711
	BR 2002011272	A	20040803	BR 2002-11272	20020711
	EP 1442082	A1	20040804	EP 2002-767198	20020711
	R:	AT, BE, CH, DE, DK, ES, FR, GR, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK			
	CN 1533416	A	20040929	CN 2002-814586	20020711
	JP 2004536202	T	20041202	JP 2003-515596	20020711
	ZA 2003009589	A	20040628	ZA 2003-9589	20031210
	US 2004205912	A1	20041021	US 2004-484135	20040117
	US 7066969	B2	20060627		
	IN 2004CN00329	A	20051223	IN 2004-CN329	20040217
PRA1	EP 2001-810719	A	20010720		
	WO 2002-EP7732	W	20020711		
OS	MARPAT 138:138767				
G1					

L8 ANSWER 4 OF 4 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



AB The invention relates to azo dyes (I and/or II; A = optionally substituted benzenesulfonic acid group; R = H, optionally substituted C1-4-alkyl; X1, X2 = N-containing group; n = 0, 1), the compds. being in an internal or external salt form. The dyes are prepared using ANI2 as the diazo components. The dyes are predominantly red and show high degrees of dyeing exhaustion and fastness to water and light. In an example, the condensation product of cyanuric chloride with 3-(diethylamino)propylamine and 6-amino-1-naphthol-3-sulfonic acid (1:2:1) was prepared and coupled with diazotized 1-naphthylamine-6-sulfonic acid to give a red dye.

RE, CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

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FILE 'REGISTRY' ENTERED AT 10:58:10 ON 14 JUN 2007

L1 STRUCTURE UPLOADED

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L2 10 SEA SSS SAM L1

L3 166 SEA SSS FUL L1

FILE 'CAPLUS' ENTERED AT 10:58:57 ON 14 JUN 2007

L4 76 SEA ABB=ON PLU=ON L3

D

D 2

D QUE L4 STAT

D 1-76 IBIB IABS HITSTR

E LENNARTZ MICHAEL/AU

L5 11 SEA ABB=ON PLU=ON "LENNARTZ MICHAEL"/AU

E WEISS SANDRA/AU

L6 3 SEA ABB=ON PLU=ON "WEISS SANDRA"/AU

L7 11 SEA ABB=ON PLU=ON L5 OR L6

L8 4 SEA ABB=ON PLU=ON L7 AND (AZO OR MONOAZO)

D QUE L8 STAT

D 1-4 BIB ABS

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